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BY

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IN taking my place as your President, my feelings are naturally of a mixed character. On the one hand, I, in common with other members of my race, duly appreciate an honour, and I sincerely thank you for this one—one of the greatest local medical honours that the profession can bestow upon one of its members; and on the other hand, there is the fear that I may not be able to do adequate justice to the position in which you have placed me. I crave your indulgence if in my address, or in any of the duties that fall to the lot of the President, I come far below the mark of excellence that heretofore has generally stamped the occupier of this Chair. For my own part, I promise to do my best; and judging from the vigour displayed by the Society of late years, I think I may confidently hope that during my year of office there will be no falling off, either

in the number of attendances at the meetings or in the high standard of the papers and discussions over which it will be my pleasant duty to preside.

In July, 1891, Mr. Glazebrook appointed me surgeon to Clifton College; but for twelve years before then I had done some of the surgical work for my father, who had held the post since the College began. I therefore consider that I have been connected with the school long enough to enable me to make a paper on "School Surgery" worth your hearing, and for me to speak not without some authority of the accidents and other surgical emergencies that have occurred in one of our largest public schools during the last few years. The subject is one that, even if it does not involve any great scientific research, may prove itself to be of some practical utility, and, considering the pleasure that the great majority of our profession take in athletics, may not be altogether without interest.

Of rowing I have nothing to say, as there is no river here accessible to the boys, and I shall confine my remarks almost exclusively to my personal experiences of football, of runs and athletics, and lastly of cricket. I must make a fourth section of curious accidents and some operations and other conditions that have come under my notice, originating in none of these sports.

Beginning with the present term, I shall mention some of the accidents that happen from football; and at the outset I cannot but say that to one watching a game of football under Rugby rules, on the result of which depends some great stake such as the honour or position of the school or house, it is marvellous that serious mishaps do not occur more frequently than they do. Fifteen boys, chosen for their weight, strength, quickness, or cleverness, are bent upon gaining an advantage over fifteen similarly-picked individuals, and for an hour and a quarter the members of each side play all they know and strain every sinew to secure the victory. Of course a certain amount of good-natured violence is exhibited, and many are the collisions, falls, wrenchings, collarings, and throwings that happen, and yet most games finish with no one complaining of very serious hurt.

At school, football is somewhat different as regards its surgical results from football played by full-grown men—at least, such is my experience. At school, fractures are comparatively rare: the most common injuries are to the muscles, and of all the body the muscles of the thigh suffer most. "Sprinter's sprain," or sprain of the flexor muscles just below their origin from the tuberosity of the ischium, is not uncommon, and very troublesome, compelling the patients to lie in bed or to walk quite stiffly for two or three weeks; but I think that giving way of some fibres of the quadriceps extensor, with its characteristic signs, is more common. This may be simply from a hard muscular effort, but I have no doubt that it more frequently occurs by the thigh coming into violent contact with an adversary's head or knee, or other part of his body, while the muscle is contracted in running. The effect is loss of power of the muscle with pain in one spot and immediate swelling above it, giving evidence of rupture of some of its fibres. This condition is sometimes slight and the boy makes no complaint; but a few days later, when attempting to run, more of the damaged muscle gives way, and the result is that the player is incapacitated. The frequency of this accident is remarkable, and it occurs not uncommonly more than once in the same individual, showing that there must be some natural weakness of the muscular fibres. I think that these cases of rupture of muscular fibres are more common at the beginning of a season than later on, when the muscles from constant and regular exercise are in a harder and better condition.

Allied to this accident is one of separation of the anterior inferior spine of the ilium by muscular action, of which I have seen three instances. Very little notice has been taken of the condition in systematic works on surgery, but it is one that presents most definite signs. The anterior inferior spinous process is an epiphysis that appears about puberty and is not completely united with the rest of the bone until the twenty-fifth year; it is the origin of the straight tendon of the rectus femoris, and it is doubtless the forcible contraction of the rectus that causes the accident. The cases were all characterised by the same symptoms, which were loss of power in the

thigh and a sensation of something having given way near the hip during a violent muscular effort. I may take for instance the details of the most recent case. A boy, aged fifteen and a half, thin and overgrown, on the third day after coming back from the holidays, while playing punt-about, took a drop-kick at the ball and missed it. Whether the abortiveness of the kick was the cause or effect of the accident, I cannot say—the latter, I think. He was able to walk to his house, and I was not called to see him till next day. Then there were pain and swelling in front of the hip-joint, and a hard mass could be felt in the tendon; and on flexing the limb on the body, soft crepitus could easily be felt by moving the fragment sideways. The other cases had the same distinctive signs. Rest in bed in the flexed position and bandaging was the treatment used, and the patients were about again in from three to five weeks. There was no evidence of any permanent weakness.

I have seen a case presenting very similar symptoms in a boy aged seventeen. He felt something give way near his hip, and there were thickening and shortening of the fleshy part of the rectus, with inability to raise the leg from the bed. In him I believe one tendon of the rectus was lacerated near its origin, and in this case the pain and weakness lasted a longer time than in the cases of fracture previously mentioned.

Of other muscles or tendons giving way or being badly stretched I have seen many instances—notably, a rupture of the flexor tendons of the wrist from a fall on the hand; two cases of stretching of the flexor tendon of the ring-finger by its being forced backwards; a distinct case of rupture of the gastrocnemius, probably caused by a hack from behind; and many cases of strain of the erector spinæ, sometimes with and sometimes without swelling of the muscle of one side. This in football is possibly done by the violence of being caught round the waist and thrown. One case, however, occurred in a boy who was playing Association football in the spring, and who came under my care when he came back for the summer term. In this term he quite recovered and played cricket, but the first game of Rugby football in October brought back all the old symptoms of injury to the erector spinæ and he was incapacitated.

Bruises and blood-tumours under muscles I will pass over, though some of the latter give rise to much pain and inconvenience—especially those under the pectoralis major and the vasti as they cover the condyles. Effusion of blood among the muscles of the thumb in one case gave a great deal of trouble. Hæmatoma of the ear is a very common affection caused by football, occurring chiefly among the forwards, whose ears get a good deal crushed in the scrimmages. It is an unsightly condition, and one that, if not successfully treated—and success in its treatment cannot be always ensured,—leaves the patient with one very ugly ear for the rest of his life. The treatment which I have found most generally useful is to let out the contents of the tumour by one or more incisions—the contents being often clear serum—and then to prevent its re-forming by keeping a wooden clip on the pinna, which exerts gentle pressure for a day or two. If the contents suppurate, as they sometimes do, of course the pus must be evacuated and a drainage-tube kept in; but I believe that this nearly always results in an unsightly thickening.

Of dislocation of the larger joints from football I have had no experience: dislocation of the patella occurs, but is generally reduced by the player himself or his friends immediately on receipt of the injury. I have seen some cases of dislocation of the thumb,—two in one day, curiously,—and many cases of dislocation of the joints of the fingers, and they have occurred in picking up the ball in a charge; and I may say here that a great many more of the smaller accidents occur in a loose scrimmage than when the players are packed together. I have seen two or three cases of partial dislocation of the outer end of the clavicle, a condition from which, in my opinion, perfect recovery seldom takes place.

Fractures are decidedly rare. There was one case of a broken leg at the College last year, and I can recall several others, but not very recently. Fracture of the clavicle is the commonest, and next to that fracture of the forearm; among the smaller boys this is, as one would expect, often of the greenstick variety. I have heard the snap of a fractured ulna when I have been standing close to a game. A broken nose

sometimes comes under observation, and a broken rib is not unknown; and I have seen a case of fracture of the lower end of the sternum from Association football, but not at the College.

One alarming accident was a rupture or fracture of the trachea. When I saw the boy there was a tender spot about three rings below the cricoid, but no bruising; the throat, neck, face, and chest were quickly emphysematous, and there was great difficulty in swallowing but not in breathing. Fortunately these symptoms began to improve very quickly, and in ten days had entirely disappeared.

Sprains of the ankle are very common, as one would expect, but sprains and injuries of the knee-joint are nearly as common and much more serious. Effusion into the knee after a sprain and giving rise to considerable trouble occurs more commonly than it would if boys could be made to look upon a sprain of the knee as a serious injury that requires rest from the first. I have had some cases of the joint becoming full of blood, causing a great deal of pain, and I have had cases of persistent tenderness along the edge of the semilunar cartilage; but the common result of knee-joint injuries is, to find the patella floating and the *cul-de-sac* above the knee distended with fluid. In these cases I may say, and I know it is at the risk of saying nothing new, that there is no plan of treatment half so efficacious as to blister the knee all over while it is kept at rest on a McIntyre splint, and to make the patient wear an elastic bandage or knee-cap directly he is able to do so.

As regards flesh-wounds, there is no special feature in them arising from football; the custom of hacking has gone out, and now one does not often see a serious break of the skin below the knee. The time was when it was the exception for a football player to have an unwounded shin, and many can show the scars of wounds caused long ago. The ankles sometimes get cut, but chiefly by players on the same side as the hurt player, the wound being commonly behind the malleolus. Scalp wounds are not uncommon.

I cannot pass over a case of periostitis of the tibia with suppuration that I had in the person of one of the pluckiest players in the school. He had had repeated kicks in several

matches on the same part of the front of the tibia, and when he applied to me on account of pain in his leg there was an abscess under the periosteum, about four inches above the ankle. This was opened and drained, and although sinuses formed, and took some time to heal, yet complete recovery took place without necrosis, which would probably have occurred had the incident happened to one in the lower ranks of life.

I had hoped to have drawn some definite comparison between Rugby and Association football from a surgical point of view, but my experience of the latter hardly justifies it. I am inclined to the opinion that, as regards injuries to muscles and joints, Rugby is the more dangerous, while Association accidents are fewer, but when they occur are often serious. Cuts from collisions, and fractured and otherwise injured legs from cross-shins, are the most common. I will mention two curious accidents that I have seen as the result of Association football. One was a severe kick in the face that a man received who was trying to head the ball when his adversary was making a high kick at it, and the other was a cornea cut across by the ball. This, I believe, must have been done by a loose tag. The result was loss of the eye.

In the spring term, from January to April, the long runs take the place of football, and towards the end of this term the athletic sports come on; and I propose now to deal with certain accidents that occur in the runs and in the practising for the athletics. On the subject of runs there is from a medical point of view a good deal to be said, but not officially by me. The medical examination of each boy, the question of his strength and of the healthiness of his heart and lungs, belong to the physician of the school, under whose care also are placed the cases of exhaustion amounting almost to collapse that occasionally occur as the result of a race such as the Long Penpole run. Without trespassing on the province of my friend and colleague, Dr. Fyffe, I may give my personal opinion as to the value of the runs, which is that they are of more good than harm, and in healthy boys very seldom cause any mischief. The value of the lesson of endurance that the runs teach more than

compensates for the fatigue and the few accidents they cause. Were they abolished or much diminished, as many parents wish, the general result would probably be an increase in the amount of ill-health. It is a cold and damp season of the year, and the runs keep the boys in training better than other games would. Other games provided for so large a number would probably involve standing about by some boys, and this would be dangerous; and if no systematic active exercise were enforced, the demoralising effect of loafing would be sure to make itself evident in the present satisfactory tone of the school.

Surgically from runs I have had to deal chiefly with the legs and feet. Corns are peculiar and very troublesome; they take the form of large flat thickenings of the epidermis on the tread of the foot. They are not as a rule taken serious notice of till they become inflamed, and then they sometimes suppurate. The frequency of the occurrence of these flat corns makes me think that they are caused by the India-rubber sole of the running-shoe being too flexible, and so the weight of the body is concentrated on the part of the sole just behind the web of the toes, instead of being spread over a larger area as it is when leather soles are worn.

Frequently flesh-wounds on the leg occur from jumping into a hedge or ditch where there is a hidden stake or broken stump, and these wounds present a curious similarity. They consist of a V-shaped tear with the apex downwards. There is always a great retraction of the flap and generally some foreign material is present in the wound when it comes under observation, so that it is no wonder that they do not heal very readily. One peculiar case was as follows. A boy thought he hurt his thigh in getting through a hedge, but ran home and did not complain till next day, when I removed a small piece of wood from a very small wound in the front of the thigh. As there was afterwards more thickening than could be accounted for by cellulitis arising from the small foreign body, I gave him chloroform and made an incision, and drew out a piece of blackthorn quite three inches long.

Sprains are of course very common, chiefly those of the

ankle-joint; but I have had many cases of sprain of the transverse joint of the foot to which I should like to draw attention. The condition, started by landing from a jump on uneven ground in thin shoes, is made much worse by the boy continuing to run, or perhaps going for another a day or two after. Pain and slight swelling in the neighbourhood of the astragalo-scaphoid joint appear, and however carefully the case is treated it is a long time before complete recovery takes place. Indeed, I may say in this place that as a rule sprains are generally very much underrated as to their consequences, and if any liberty is taken with the injured joint before it is quite well, a relapse of the symptoms is likely to take place which incapacitates the individual from active exercise for a considerable time. It is doubtful indeed whether a simple uncomplicated fracture of a long bone is not a less serious injury than a bad sprain.

Teno-synovitis of the peronei and other tendons sometimes results from a run, and I have had a troublesome case of sprain of the external lateral ligaments of the knee, a fractured fibula, two or three cases of strain of the abdominal parietes and diaphragm, and many cases of abrasions and blisters. These form the great majority of the casualties that have occurred, and I have had to stop boys from running on account of flat-foot, varicose veins, and hammer-toe.

I shall now record one or two results of the athletic sports, or of the practising for them, which have come under my notice. Sprain of the muscles of the back of the leg or thigh in starting to run or jump is common, but I have already alluded to that in speaking of football. One troublesome case from jumping was a strain of the external rotator muscles of the hip. Jar of the heels in the long jump is a painful condition for a few days, but not serious; and falls over the hurdles occasionally cause damage.

I must mention more in detail a case of fracture of the patella, which is interesting on account of its cause. A boy just six feet high and a few days under fifteen years old, and a favourite for the high jump under fifteen, ran to take off for it. He was seen to rise very little from the ground, and to fall "in

a heap." Mr. W. G. Grace, who was close by, rendered first aid, and the boy was carefully carried to the Sanatorium. We found a transverse fracture of the patella, the upper fragment of which was pulled up three inches, and the lower or smaller fragment comminuted by a longitudinal split. After several consultations, and explanations of the nature of the operation of wiring the fragments and of the statistics of the results of recorded cases, the parents, contrary to my advice, decided against any cutting operation. I therefore treated the case by splints and apparatus. By continuous weight-extension on the muscles of the thigh, after three weeks there was a gap of three-quarters of an inch, and I never could improve upon that. He was allowed up five weeks after the accident, and the pressure was kept up by lacing over a gap in a leather splint. At the present time, eighteen months after the accident and six months since all splints have been left off, there is an interval of 1¼ inches between the fragments; he is able to walk with almost a natural gait, swim easily, and can trot but not run fast. In this case I believe wiring the fragments would have greatly shortened the treatment and have given a more satisfactory result.

Another case of fracture is worth recording, even if it is only to excite sympathy for the unfortunate individual to whom it occurred. The next jump to the one I have referred to last was taken by a boy aged 14½, and he fell and broke his radius. The high jump competition was therefore stopped for the day. This occurred at the end of the spring term, and the broken arm spoilt the boy's Easter holidays. However, he was well enough to play cricket during the last half of the summer term. The first day of the summer holidays he fell off his bicycle and broke the same arm again. He recovered from that; but at Christmas, in doing a banister slide, he fell and broke the same arm again higher up, and he thus spoilt nearly the whole of the pleasure of the year's three vacations by three times breaking his arm.

We come now to the summer term and the accidents and injuries that may happen from cricket, a game that is remarkably free from danger. Considering the huge number of

people who now play the game, and the sometimes great pace of the bowling, and that too on a wicket that is the reverse of perfect, I think it is curious that so few cases of serious injury occur. At a school with a carefully-kept playground, it is not generally in a match that we see accidents. They occur most commonly during practice at the nets, and when many games have to be played in a limited area, and therefore the fieldsmen of one game are near, or perhaps overlapping, the fieldsmen of another. An unexpected blow from the ball frequently occurs, though not commonly resulting in much harm. I have had, however, under my care from this cause many contusions, two or three cases of concussion of the brain, and at least one case of fracture of the skull. In formal cricket the commonest accident that might be called serious is, I think, dislocation of the top joint of the fingers in catching or stopping a hard hit. This results in perfect recovery after a few days inconvenience, provided the dislocation is reduced at once; but I have seen a case in which permanent stiffness of the joint ensued because the boy let the joint remain out for a fortnight before he sought surgical assistance. In a ladies' match last year one of the players at a school in Clifton attempted a catch at short-leg, and the result was a bad compound dislocation of the middle finger and a simple dislocation of the ring-finger. This hit was by a girl considerably her junior. Next in frequency perhaps is the more or less split web of the fingers, and I believe it always arises from the clumsy way in which a fieldsman attempts a catch. If his fingers are up towards the ball,—and the accident happens more often from a lofty hit than a low one,—the ball may come down between separated fingers and so split the web. The ball should be received into the palms of the hands. Injured knuckles and fingers from playing fast bowling without gloves, and blows on the thighs above the pads, injuries from collisions, broken noses and cut lips, are common and need no special comment.

The most important surgical question that arises from cricket is, how far a growing boy ought to tax the strength of his muscles and frame in bowling. Bowling with a high-reaching delivery and as fast as possible is a frequent source of

strain of the muscles of the back. If the bowler is right-handed, the trouble appears in the left erector spinæ and quadratus; and when once it has appeared, it is sure to recur if a considerable rest from that kind of bowling be not enforced. It is easy to see that lateral curvature may be induced, and I have seen cases where, if it has not been begun, it has been made materially worse by this practice. Some instances of sprain of the scapular muscles have come under my notice also, from bowling and from throwing. The question of bowling by young boys is one that ought not to be lightly passed over. The ball is too heavy and the pitch is too long, in my opinion, for most boys below the age of thirteen or fourteen, and boys can be taught to play with more precision if a smaller ball is used and a shorter pitch.[1] It is painful to see a small boy with the ordinary cricket ball and at the regulation pitch go on, over after over, trying to bowl as fast as his strength will let him, and I am sure it would be far better for the boys' own sakes, whether as regards their general well-being or their future cricket career, if some modification were made in the laws of cricket, defining a certain weight and size for the ball and a certain length of pitch for matches between boys under the age of fourteen.

In preparing the cricket part of my paper, although I do not wish it to be understood that he is in any way responsible for the opinion I have just expressed, I have asked to give me his experiences of accidents in the cricket field the greatest of living cricketers, who, among the many records that he has broken, holds the world's record—at all events, among medical men—of having his name known to the largest number of English-speaking people in the universe. He with us all rejoices at the immunity from serious injuries which cricket enjoys. One injury, he says, that occasionally occurs, and one which he has suffered from himself, is, that in starting from the crease to make a sharp run a few fibres give way in the gastrocnemius, making the player feel as if he had been hard hit on the back of the leg. This quite incapacitates the player for the time from running, and the best treatment, although

[1] This I am pleased to hear has been the custom in the Junior School at the College for some time.

very painful, is to have the part strapped with firm plaster, or to have an elastic bandage put on. Indeed, for many cricket injuries an elastic bandage is a very useful item in one's cricket bag. Mr. W. G. Grace has seen one death in the field, and that was a sad case of a boy at Harrow who received a blow on the head, while umpiring, from a ball hit to leg by a batsman of his own game, while he was paying too much attention to a more important game played close by. Another death, but not on the cricket field, occurred a few years ago in the Notts *v.* M.C.C. match. A professional player was stunned, but insisted next day in travelling home, saying he was not seriously hurt. Coma came on and he died before he reached home, presumably from hemorrhage. On August 22nd this year, a player at Clapham when batting was struck in the neighbourhood of the heart and died in a few minutes.

A curious case that Mr. Grace mentioned was that of a Kent gentleman, who, in playing at Gloucester against Gloucestershire, jumped at a catch, while fielding at point, and dislocated his shoulder. The following year, in the same match but at the County Ground, Bristol, he fell while fielding and met with the same result. Mr. E. M. Grace brought him at once to the Infirmary, where I happened to be on duty, and I reduced the dislocation. Notwithstanding that he had to be put fully under chloroform to effect the reduction, the Kent player insisted upon going back to see the match an hour after he had come round. One case Mr. W. G. Grace cited as showing the pluck of some players was this. A wicket-keeper dislocated the top joint of his finger so badly that the skin was split across. This was reduced and a bandage put on. He then resumed his place at the wicket, and did his work with credit till the end of the match. Bad blood-blisters are common, and sometimes he has seen broken metacarpal bones, but never any serious damage to the abdomen or to the scrotum. This last fact rather surprised me, as a blow upon this part of the body of the batsman or wicket-keeper is apparently so frequent.

Leaving cricket and coming to the fourth and last section of my paper, I wish to detail one or two serious accidents and to make a few remarks on other occurrences that have taken place

at the College, and that have not originated in any of the games I have previously mentioned. One accident which at one time looked as if it might have a very serious termination occurred in this way. The boys in a certain house, under the supervision of the house-master, were having practice in the use of the fire-escape, and were using that kind of escape which consists of a long canvas bag, down which the boys shoot one after the other. They ought to swing from the bar by which the apparatus is attached to the window, into the canvas passage, but the boy of whom I am writing let go his hold too soon and struck the lower part of his spine violently against the window-sill. He went down the bag safely and could walk afterwards, and although in pain, did not complain to the house-matron till next day. Great pain in his back and abdomen then suddenly came on, and there was copious bleeding from the rectum and some spitting of blood. When I saw him soon afterwards the abdomen was swollen and tender, with dulness on percussion just above the crest of the ilium on the left side and in the left loin—some blood was coming from the rectum, and on examination *per anum* I could feel a considerable effusion of blood. By rest in bed, with the help of opium, this all disappeared, and in ten days time he was comparatively well. The boy was in an excellent condition of training, and I attribute his speedy recovery from these dangerous symptoms partly to this cause. Another accident worth mentioning was that of a boy who was trying to circle—as if it were a horizontal bar—one of the nets that are stretched between the trees to prevent the ball going over into the road. The net gave way, and he fell a few feet on to his back on the grass. He was perfectly well and strong before. After the accident there was pain in the region of the 10th and 11th dorsal spines, but below the 10th there was a gap and the 11th was nowhere to be felt. He complained of slight numbness and tingling of one leg, but there was no paralysis. I applied a plaster-of-Paris jacket. After three weeks a London specialist was called down to see him. This gentleman was of opinion that the case was one of congenital absence of that particular spinous process where the boy was hurt. It is a curious coincidence that the fall led to the discovery of such a

rarity. It is the only case of absence of one of the dorsal vertebral spines that I have ever seen.

From the gymnasium I have had a few accidents, but none to call for special mention of their details. There was a bad fracture of the surgical neck of the humerus from a fall, and a very painful strain of the muscles and fasciæ in front of the chest from the boy going down between the parallel bars. I have also seen a case of considerable effusion in the elbow-joint brought on by boxing. One accident in the swimming bath must be mentioned. A boy slipped off the edge of the bath, and somehow his foot caught inside a handrail that runs round the bath just above the water; his ankle was fixed between the rail and the wall, and his body fell into the bath. Instead of the leg breaking, the soft parts were so crushed that a few days later large bullæ formed, and the whole aspect of the limb was as if gangrene had set in. However, after two or three weeks anxious nursing, the inflammation went down, and the boy recovered by the end of the term; but he broke his leg riding a pony in the ensuing holidays. In the chemical laboratory cuts with broken glass, and splashes of acids and other fluids in the eye, occur, but I have not had any case of real importance.

From fives, bat-fives, and racquets I have not had many patients. Sprains of the hips and injuries to the finger- and thumb-joints from hard hitting, and a peculiar sprain of the shoulder, are most common in hand-fives. This sprain of the shoulder is so often complained of that it ought almost to be dignified by the name of the fives shoulder, in imitation of the lawn-tennis elbow. It consists of a sprain of the supra- and infra-spinatus muscles and triceps, and gives a great deal of pain down the arm. From racquets I have seen two serious cases—one of concussion from a blow by the ball on the temple, and another a bruise of the globe of the eye and lid which gave rise to considerable trouble. The ball was hit from behind and glanced off the handle of the front player's racquet and hit his eye. There was ecchymosis of the lid and sclerotic, intense photophobia and dilatation of the pupil; there was no intra-ocular hemorrhage. The dilatation was still present when the

boy left four weeks later. He had not been able to use his eye at all without pain.

Though golf hardly comes under the category of public school games, I may just mention it in order to point out that there are two common injuries incidental to it. One of these is a troublesome cramp of the forearm from holding the club too tightly, and which when it comes on at a critical moment often spoils the stroke; and the other is effusion in the elbow-joint from the jar of hitting the ground in bad hits. This is probably only experienced by a novice or a clumsy player of the game. I have also seen cases of strain of the left side of the back from hitting.

The tendency in most of the boys is to make the best of any injury, so that they may be kept out of school and therefore out of games no longer than is absolutely necessary. But of malingering to shirk work at school I have had a few amusing instances. One small boy had an abrasion of his shin which resisted all our attempts to get it to heal, and it was found that he kept the wound open by brushing it with some developing solution for photographs. In another term the same boy frightened us all by telling the matron that the bulb of the thermometer which she had placed in his mouth had broken off and that he had swallowed it. Knowing his previous history, I ordered a four days quarantine with very close observation; at the end of which time, as neither the bulb nor any symptom appeared, he was sent back to school properly punished.

In referring to surgical maladies other than accidents or their consequences, I shall merely enumerate the cases that have come under my care, because they present nothing that especially needs comment. Where there is any chronic disease or condition that requires surgical aid, the chances are that the boy is kept at home for treatment, and I have had therefore at school to deal chiefly with emergencies. Hernia is not very uncommon, but I have had one case of herniotomy for strangulated hernia that I did for my father some years ago. This boy was in the eleven next year. I have seen instances of orchitis during the development of the organ, and of mastitis from the rub-

bing of the brace-buckle. Retention of urine from nervousness I have seen, but I have never passed a catheter, the sight of the instrument being enough to bring about the desired result. I have several times had to remove the tonsils and to circumcise. One case of tracheotomy, one case of aspiration for pleurisy, two cases of draining the chest for empyema, one case of removal of a piece of glass that had been embedded in the hand for twelve months—these, besides opening abscesses and other trifling operations, form the list of all the operations that I remember to have done on the College boys. Ingrowing toe-nail is one of the smaller troubles with which one not infrequently meets. A great many ear and eye diseases come under my notice, and I know of no more anxious case than a bad one of suppurative disease of the middle ear: we had an epidemic of it at the College three years ago. Of the eye diseases I may have something to say at a future time. I have not seen an outbreak of ophthalmia, but there was one before I was officially connected with the school. The number of boys whose refraction is abnormal is very great, and one has to be careful that the vision of each boy that is going to be prepared for examination for entrance into any of the Services is good enough to pass the Medical Board before he goes on with the special education for that service. Testing for spectacles, giving anæsthetics for the dental surgeon, and revaccination form no small portion of my work.

In conclusion, I feel that my remarks would be incomplete if I did not offer an opinion as to whether the advantage gained by the boys from the games I have mentioned is worth the risk of accident that they run. I say that decidedly it is worth the risk. I have necessarily brought into prominence results of many accidents, but I do not wish it to be understood that accidents are unduly common. The great majority of the boys at the College meet with no serious hurt, and have never come under my care at all; and when we think of the immense gain to the health and strength of body, mind, and character of the boys that the games give, the chance of accident sinks into comparative insignificance. There are no outdoor games that are perfectly safe, and the very fact of there being an element

of danger, especially in such a game as football, not only lends the excitement that makes the game worth playing, but also engenders the qualities of pluck and self-sacrifice that make some English boys what they are. If asked whether any change should be introduced, beyond the hint that I have given above as to the care that should be exercised over the younger boys in learning to play cricket, I would say that no change is necessary. In football I think it important that boys of about the same age should play together, and I believe that that plan is carried out in all large schools. Personally, I think, and I believe the great majority of the profession will agree with me, that the school authorities are right, not only in encouraging, but in enforcing among able-bodied boys the games that are at present the custom.

I thank you for listening to this address, which I am afraid has been long, and possibly I may have sorely taxed your patience by going too much into trivial details. I have endeavoured only to call attention to the surgical incidents that fall to the lot of a school surgeon, and I have avoided almost all reference to treatment. I must say that, thanks to the good general health of the boys, the excellent hygienic condition of the College, and the careful nursing of the matron at the Sanatorium, the results of the treatment are most satisfactory, and would bear a favourable comparison with those met with in hospital patients of a different class of life.

TWO CASES OF FIBROID DEGENERATION OF THE MYOCARDIUM.

BY

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THE accompanying illustrations of examples of two cases of fibroid degeneration of the heart that have recently occurred in the *post-mortem* room of the Bristol Royal Infirmary may prove of some interest to those readers who have few opportunities of acquainting themselves with the appearances of morbid anatomy.

Fig. 1 is a sketch of a hypertrophied heart which shows considerable rounding of contour in the neighbourhood of the apex. The left ventricle is laid open by a longitudinal incision, and two apertures have been cut in its anterior wall. This incision and these apertures show how greatly the diameter of the wall of the ventricle differs at the apex and the base. At the base it is much thickened, but at the apex greatly thinned,

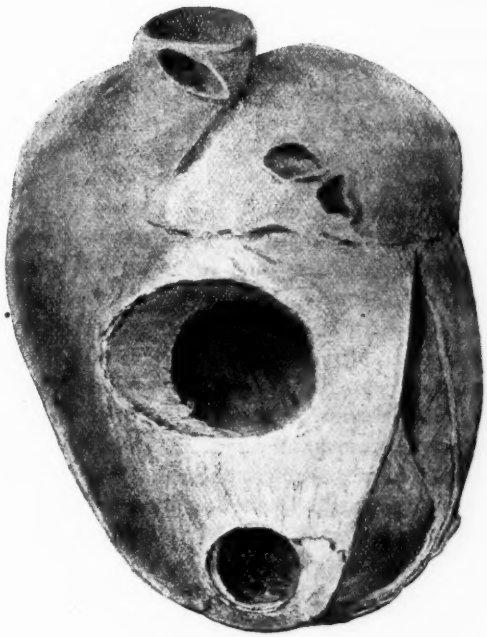

Fig. 1.

A heart seen from the left, showing a left ventricle of more or less globular shape, due mainly to fibroid atrophy and bulging of the wall in the neighbourhood of the apex.

the muscle substance having been replaced by fibrous tissue over an area about one inch and a half square. This is the main abnormal feature. Other less noteworthy details are visible in the mounted specimen, but are not seen in the sketch.

The two surfaces of the pericardium were universally adherent, but could be easily separated, except in the neighbourhood of the apex, where a small portion of the pericardium had to be left attached to the heart, and on opening the ventricle the greater part of the endocardium was seen to be of opaque milky-white appearance. All the valves were healthy and the coronary arteries were not diseased. The heart was removed from a woman aged 36, under the care of Dr. Shingleton Smith. There were indications of syphilis in the presence of scars of undoubtedly syphilitic nature on her forehead and in the neighbourhood of the knee-joints. There was also a small gumma in the left lobe of the liver, and scars of others were present as fissures in the right lobe. The case then appears to be fibroid degeneration of the myocardium following gummatous infiltration.

Fig. 2 illustrates the more common variety of fibroid degeneration. Three cuts on the posterior surface of the heart in the neighbourhood of the inter-ventricular septum open up white patches, which in the fresh state were glistening and tendinous in appearance. Two smaller white spots are seen on the surface of the heart marking the site of similar patches. The sketch endeavours to illustrate one other point. Running downwards over the ventricle a branch of the right coronary artery is represented, tortuous, thickened, and in places calcareous. The patches shown in the sketch were by no means the only fibroid spots present. There was a large one at the apex, others were in the septum, and the base of one of the musculi papillares was seriously affected. This specimen, which is an example of patchy fibroid degeneration associated with disease of the coronary arteries, was removed from a man, aged 56, who had been under the care of Dr. Prowse, and died of carcinoma of the stomach.

As indicated above, the first case is, with little doubt, an example of fibroid degeneration of the heart-wall following the presence of a gumma. In this case life had lasted sufficiently long for all definite traces of its gummatous origin to have disappeared; but death sometimes occurs while the local patch still presents the characters of a gumma, as in a case recorded

by Dr. Newton Pitt, where a man, aged 28, died suddenly from rupture of the heart-wall at the diseased spot.[1] More commonly, however, life is prolonged until the destructive appearances of a gumma have disappeared and a fibroid area alone remains. The heart is of necessity weakened, not only generally but locally, by the fibroid area, which may yield before the strain of intra-ventricular blood-pressure, and give rise to an

Fig. 2.

A heart seen from behind. It shows an atheromatous right coronary artery and several white fibroid patches in the muscle-wall exposed by incisions.

aneurysm of the ventricular wall. Curiously enough, however, in spite of the destructive character of such a lesion the heart may give little indication that anything serious is wrong, until it suddenly fails, occasioning immediate death. This may occur

[1] *Tr. Path. Soc. Lond.*, 1891, xlii. 61.

whether a simple fibroid patch is present, or whether that patch has yielded so as to form an aneurysm. At a recent meeting of the Clinical Society, Sir Dyce Duckworth [1] recorded a case of sudden death of a man, aged 35, with aneurysm of the left ventricle. He mentions that the records of fourteen similar cases showed that sudden death occurred in eight instances.

The second case of which a sketch is given is an example of the patchy form of fibroid degeneration, which variety is generally associated with some disease of the coronary arteries. It has been supposed that the degeneration follows interference with the circulation through these arteries and their branches; but the disease of the arteries may sometimes be slight, and when extensive it is not always evident that the flow of blood has been materially hindered. Even in the case figured above, where degeneration of the arteries was extensive, there was no evidence of thrombosis of the small branches. Possibly in some instances the disease of the arteries and of the heart-muscle are dependent upon the same cause. Whether such is or is not the case, patchy fibroid degeneration may occur without any disease of the coronary arteries; and some of these cases, like the localised variety, are probably due to syphilis. At least, cases have occurred in which small gummata have been scattered through the heart-muscle. For example, Dr. W. Pasteur records the case of a woman, aged 30, probably a prostitute, who was found dead in the streets of London. Examination of the heart showed it to be dotted over with yellowish-grey patches of various shapes and sizes, which microscopically had the appearances of gummata.[2]

This patchy form of fibroid disease, like the more localised variety, frequently ends in sudden death. During the space of two months I saw no less than three cases brought into Guy's Hospital, where sudden death had occurred from failure of the heart due to fibroid disease. This experience, however, was exceptional, since only nine similar cases occurred during a period of ten years.

Some text-books speak of myocarditis following rheumatism

[1] *Brit. M. J.*, 1895, ii. 974.
[2] *Tr. Path. Soc. Lond.*, 1887, xxxviii. 103.

as a cause of fibroid disease of the heart. One can easily conceive this to be possible, since some increase of interstitial tissue in the myocardium may occur as a sequel of pericarditis the result of rheumatism. Possibly in rare instances rheumatism throws the force of its virulence wholly upon the myocardium, leading to the development of fibroid changes in the heart-wall, while the pericardium and valves remain healthy. One case I noticed on perusal of the Guy's Hospital *post-mortem* records, where death occurred in a boy, aged 16, from fibroid disease of the heart, that seemed to bear out such a view. Fibroid degeneration of the heart, however, rarely occurs at periods of life in which the heart is most susceptible to rheumatic poisons, and this cause of the disease cannot be a common one.

NOTES ON EGYPT AS A HEALTH-RESORT.

BY

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THE Northern African seaboard has long been recognised as a region which presents many and great attractions as a winter resort for sufferers from various affections of the chest, and which is, at the same time, easily accessible to Europeans. Certain regions, more especially Algiers, have long successfully competed with the Riviera for the patronage of French and English patients who are compelled to exchange the cold and damp of their own less favoured winter for a more genial climate.

Egypt is a land of all-engrossing interest, both in its historic remains and in the varied phases of modern life that are ever before the traveller's eye; and as it is so rapidly becoming one of the most popular winter resorts, I have endeavoured, in the narrow limits of the present article, to indicate the various routes by which it may be reached, the character of the climate, cost of living, and the various affections for which it is most suitable, together with other practical

points which may aid the practitioner in choosing a health-resort suited to the condition of health and the means of his patients.

For those who greatly dislike the sea voyage, Alexandria is the best port of entry, as it is only six days journey from London (by Paris, thence to Marseilles, fourteen hours, Messagerie steamboat to Alexandria, three days); or, going overland to Brindisi, the P. and O. boat can be taken for Alexandria. After a night's rest, one proceeds to Cairo by the morning express, a three hours run. Another route has recently been provided by the P. and O. Company by boat from Venice to Port Said, or by the Orient line from Naples to Port Said, five days. The long sea route from London or Plymouth to Port Said is often to be preferred for those who are good sailors—ten days at sea. One can sleep at Port Said if the boat arrives at night; otherwise it is better to go on to Ismailia, four hours by rail, where there is an excellent inn, now taken over as a succursal to Shepheard's Hotel (Cairo); or, if the patient is strong enough, the remainder of the journey by rail to Cairo may be accomplished in another four hours.

In Egypt everyone is, or should be, a "Cook's tourist," there is then no fear of being pestered by the clamorous crowd of native porters. The ubiquitous "Cook" boards the steamer, and one has only to hand the luggage checks to the agent, and mention the name of the hotel one is going to, without giving it another thought. If one cares to convert a peaceful journey into one long and incessant worry by officious natives who understand nothing but Arabic, unless it is a very big D——, one has only to try a journey without "Cook."[1]

Cairo has about 430,000 inhabitants, and on leaving the new and handsome station to be driven to one of the many large first-class hotels, we soon realise that, with all the brilliant pictures of Oriental life which surround us on every side, we have landed in a city where all the comfort and luxury of home life obtain. At almost all the first-class hotels in Cairo, Mena House, and at Luxor and Assouan, board and lodging come

[1] I have found that patients who have fixed a date for their passage, and are unable to go, are allowed to postpone it without further payment.

to about sixteen shillings a day, or less (fourteen shillings and sixpence) by the month, this including everything except wine, washing, and light. At Helouan Hotel the charge is 8/6 to 10/6 a day, while at the very comfortable *Pension* Antonio for those who are not strictly invalids the inclusive charge is only seven shillings a day.

I do not propose to discuss at any length the relative merits of various winter resorts, but in the briefest manner to direct attention to the peculiar conditions of Cairo and its neighbourhood, and the reasons for regarding Egypt as eminently suitable for English patients.

It is altogether beyond the scope of a short and practical article to portray the endless sources of interest and attraction of Cairo and its neighbourhood, but it is obvious that these constitute by no means unimportant features in an ideal health-resort, and the fact that there is always plenty to see and to think about, serves to distract the thoughts and overcome the depressing effects of an enforced removal from home. Moreover, a land which can show us "in the flesh" both Seti, and Rameses II. "who oppressed the children of Israel" and held intercourse with Moses; the beautiful and perfectly preserved gold and enamelled jewellery of the days of Joseph; and the Pyramids, which were of an older date to Abraham when he arrived on the scene than Westminster Abbey is to us, yet displaying at least a greater development of engineering skill than does our own more beautiful abbey, constantly brings home to us the fact that 7000 years ago Egyptians had reached a very high degree of intelligence and civilisation, and is a never-failing source of interest to every visitor.

It is only within the last eight years, however, that Egypt has developed as a health-resort for English invalids. The highly successful administration of the country under the British occupation has resulted in widespread reforms in sanitation, and giving an English complexion to the hotel and private life of a large European population. Not only is the impress of British ideas of wholesome sanitation manifest in every direction in the large towns, but it extends to the villages around Cairo and up the Nile in a less degree. As a good illustration of this, I

may say that while living in a village in the desert it was astonishing to find that a small Oriental *pension* had been fitted up with the National flush sanitary appliances. On the other hand it must be confessed that even in some European quarters in the large towns there is much to be desired in various important sanitary departments, and there is too often good reason to regard water only as "the stuff we wash in."

Climate.—The climate of Egypt during the season from November to March is much the same as a moderately hot English summer, with perpetual sunshine during the day, and cool evenings; but with this difference, that after the subsidence of the Nile, the remarkable dryness of the atmosphere renders the air bracing and tonic, and prevents the sense of oppression that one so often experiences in the moist heat of an English summer.

The following table, compiled by Dr. F. W. Sandwith[1] from the records of the five years 1884—88, the monthly bulletins being printed by the Khedivial Observatory in the Abbassiyeh suburb of Cairo, shows at a glance the mean temperature in this region, the dryness of the atmosphere, and the almost complete absence of rain and stormy wind:—

	Barometer.	Thermometer Fahr.			Humidity.		Rain in inches.	Clouds 0—10.	Wind.	
		Mean of maxima	Mean of minima.	Mean of means.	Relative.	Absolute.			Direction.	Force in miles.
January	29.98	61.4	46.6	53.6	69.7	.28	.19	4.1	S.W.	2.2
February	29.95	65.3	48.8	57	66.2	.29	.24	4.2	N.	1.4
March	29.91	73.2	53	62.8	56.2	.29	.03	3.4	N.	2.5
April	29.82	81.2	59.9	70.4	47.8	.31	.12	3.4	N.	2.6
May	29.84	86.8	63.4	75.2	48.4	.38	.22	2.3	N.	2.8
June	29.78	94.7	70.2	82.6	44	.44	.02	1	N.	3
July	29.7	93	72.2	83.8	49	.5	—	1.2	N.	4.3
August	29.7	92.9	71.4	82.2	55.3	.54	—	1.6	N.	4.1
September ...	29.83	87.5	68	77.8	62.1	.54	—	1.8	N.	4.3
October	29.89	84	64.8	74.3	65.8	.52	—	2.5	N.	3.2
November ...	29.96	74.2	56.3	64.4	67.5	.39	.21	3	N.	2.1
December ...	29.99	67.7	50.4	58.4	69.6	.33	.19	3.7	N.	2.2
Average ...	29.86	80.1	60.4	70.2	58.46	.40	1.22	2.6	N.	2.9

But the remarkably even temperature of Cairo is perhaps more fully realised when we remember that "freezing point

[1] *Egypt as a Winter Resort*, 1889, p. 25.

seems never to be reached in Cairo, while the indoor temperature of rooms on the north side of the house, kept properly shut during the hot hours, need never, during the year, exceed 83° Fahr.; and the same rooms, during the depth of winter, if properly opened to receive the warm outer air during the day, need never have a temperature below 52° Fahr., without employing a fire. By living in sunny south rooms or by employing artificial heat, the invalid can be certain all night in the winter of a temperature of 65° Fahr. or more."[1]

We have seen that the annual rainfall of Cairo is a little over an inch. At Helouan and Gizeh it is even less; while at Luxor and Assouan a shower of rain has been known to occur only once in three or four years.

Peterson[2] compares statistics as to the annual rainfall in various resorts, although, as he remarks, this is not so important as the number of cloudy and rainy days at the different health stations during the season.

	Annual Rainfall in inches.	Number of Rainy Days during 7 months. (Winter Season.)
Luxor	Practically *nil*	Usually *none*
Cairo	1	12
Hyères	33·5	32
Algiers	32	71 (6 months)
Pau	43	50 ,,
Denver	11.41	39

During September and October the Nile rises and floods the low-lying ground on either side of its banks; but by the end of November the water has subsided, leaving immense tracts of moist, fertile land. At night the dew, which is always present in lower Egypt, is especially heavy during, and for a month after, "High Nile," so that invalids should avoid going out at night till the middle of December.

But the most remarkable feature of the Egyptian climate is the peculiar dryness of the atmosphere. At Cairo the mean relative humidity is 58.46; while even during the seven winter months it averages only 63.25, and in the daytime it is much lower, often reaching 10. At Gizeh and Helouan the humidity is considerably lower than at Cairo, the difference being still

[1] Sandwith, *op. cit.* [2] *Med. Rec.*, 1892, xlii. 205.

more remarkable at Luxor and Assouan. When compared with London, where the humidity averages about 92.0 in winter, the importance of these figures is beyond dispute. The following table[1] will illustrate the difference in mean annual humidity of various places in the world:—

Luxor	50.5
Cairo	58.4
Greenwich	87
Algiers	70.7
New York	73

Prevailing Diseases, Hospitals, etc. — Amongst the natives diarrhœa is common, and infant mortality from this cause is high. This is readily accounted for, as their ideas on sanitation are primitive to a degree. In native quarters water is collected and stored in skins, or in large earthen waterpots, which act as filters. The skins are handed down from father to son till they rot, and the filters are never cleaned; consequently their filthy and slimy condition reaches a state which can be more easily imagined than described. The water is taken direct from the Nile, and in one village I saw women washing clothes and men filling water skins and pots four feet from where the refuse of a donkey stable was running into the Nile, while the lapping margin of the river was continually washing away fæcal deposits on the bank. Fortunately the inhabitants seem to acquire a sort of immunity against the natural results from imbibing Nile water from such a source. In Cairo, as in Alexandria, the water is supplied by a company, which filters its water through large sand and gravel beds, and with subsequent filtration and boiling it becomes excellent.

Tubercular disease is by no means rare amongst the Arab and Coptic natives, while the Soudanese from the warmer and drier South are very subject to consumption, a large percentage of the deaths at the hospitals being due to pulmonary tuberculosis.

Malaria is not common, and, except that it not infrequently recurs in those who have suffered from previous attacks in India or elsewhere, Europeans rarely suffer; typhus fever is fairly common amongst the natives, but in the better classes

[1] Peterson, *loc. cit.*

it is rarely seen; the latter, on the other hand, suffer from enteric fever, which the natives rarely contract. Visitors are most subject to diarrhœa from careless exposure to night air with insufficient abdominal clothing, while pleurisy and pneumonia sometimes result from chills from similar want of due care.

An analysis of 690 cases admitted to one of the medical sections of the Kasr-el-Aini Hospital in 1894 (total admissions 4,090) throws some light on the relative frequency of certain diseases; viz., typhus, 19; relapsing fever, 1; enteric fever, 0; intermittent fever, 32; ankylostomiasis, 125; pellagra, 28; bilharziosis, 21; hepatic abscess, 10; hepatic cirrhosis, 4; aneurysm, 1; parenchymatous nephritis, 29; interstitial nephritis, 0; cerebral hemorrhage, 9; locomotor ataxia, 2; disseminated sclerosis, 7; general paralysis, 3; admitted drunk, 13; datura and hasheesh poisoning, 5; mercurial poisoning (suicidal), 1.[1]

Cairo is well supplied with hospitals, for in addition to the military hospital at the citadel, there is the above-mentioned Kasr-el-Aini Hospital, with about 400 beds, on which a large sum has been recently expended in partly rebuilding and in fitting up. Dr. Sandwith kindly showed me a large number of interesting cases under his care, and one was struck by the large number of ankylostomiasis cases in his wards. The clinical clerks are mostly native students at the medical school, and all the cases were recorded very carefully and fully. I saw Mr. Milton operating and demonstrating in the theatre to a large clinic. The arrangements of the operating theatre were excellent and left but little to be desired by the most captious critic. There is a good staff of English nurses under a most able matron.

There is also a large German hospital, and a small Medical Mission hospital with a large out-patient service in old Cairo which I visited. Private nurses are not difficult to obtain from a nursing home close to the Bab-el-Lûk station, where also a few private patients can be taken in.

The State Lunatic Asylum, with about 250 inmates, is conducted on modern methods. Dr. Peterson draws attention to the fact that insanity is phenomenally rare in Egypt, which with six million inhabitants has but this one asylum, whereas

[1] *Lancet*, 1895, ii. 560.

New York State with the same population has over fifteen thousand insane in its numerous asylums. For patients there are certain advantages in residing, during their stay in Lower Egypt, away from the noise and dust of Cairo, at either Gizeh or Helouan. There is only the English hotel, Mena House, at Gizeh, close to the Pyramid of Cheops. It is eight miles drive from Cairo in the desert, a coach running daily, while carriages can always be hired. Visitors will find everything that can be desired for their comfort at this large hotel. Dr. Bentley, the present physician to Mena House, resides in the hotel, which has a chapel and a resident chaplain, a large open swimming bath, arrangements for tennis, croquet, and golf, and there are rides and excursions from Mena House.

Helouan is fourteen miles by rail from Cairo, and is a small residential suburb, also in the desert, and contains two large and comfortable hotels; numerous *pensions* and houses may be rented at low rates. Dr. Fenyez resides in Helouan hotel, and a Scotch physician, Dr. Murison, lives in the village. The hot sulphurous springs at Helouan have long enjoyed a reputation for chronic rheumatic affections; they had a reputation in the days of the Pharaohs, thus Helouan is probably the most ancient spa known at the present day. The baths were built by Ismail Pasha, and are well constructed, resembling those at Aix-les-Bains. The springs are of three varieties: (*a*) the sulphur waters, of which there are four springs yielding 700 cubic metres daily, temp. 86° F., containing free sulphuretted hydrogen; (*b*) the iron waters; (*c*) alkaline waters. These waters are employed against secondary and tertiary syphilis, chronic skin diseases, hepatic congestion, &c.[1]

[1] The composition of the waters is approximately (Fenyez):

1. Sulphur Springs—

Chloride of Calcium	...	...	1.88 parts in 10,000.
" " Magnesium	...	...	18.105 " "
" " Sodium	...	...	366.892 " "
Free Sulphuretted Hydrogen	...		0.731 (470 c.cm.)
" Carbonic Acid	...	.. ...	1.200 (610 c.cm.)

2. Iron Springs—

Chloride of Sodium	...	...	372.67
" " Magnesium		...	106.02
Sulphate of Magnesium		...	23.5
Bicarbonate of Lime	...	...	59.42
Bicarbonate of Iron	...	...	0.58
Free Carbonic Acid		...	.511 (260 c.cm.)

3. Alkaline Waters—

Chloride of Magnesium			31.158
" " Sodium		...	40.17
Sulphate of Magnesium			10.79
Bicarbonate of Lime	...		12.56
Free Carbonic Acid	...		0.117 (60 c.cm.)

Helouan being 185 feet above the Nile, surrounded by the desert and protected on the east by the Mokattam range of hills, has a remarkably dry and sterile atmosphere, and is rapidly becoming not only a favourite locality with invalids in Lower Egypt, but also a large residential suburb of Cairo.

At Luxor, first cataract, there are two comfortable hotels. The more fashionable Luxor hotel is close to a large sheet of water, and is probably less healthy in situation than the quieter and very comfortable Karnak hotel. Dr. Longmore and Dr. Canney are in practice here. Some patients go still further south to Assouan, about a thousand miles up the Nile from Cairo, where English medicine is well represented by Dr. R. W. Yalland. Luxor and Assouan are reached by boat, dahabiyeh, from Cairo. The dahabiyehs are very comfortably fitted up, and Thomas Cook and Sons make all arrangements, so that for a patient with ample means the journey to these far distant resorts is accomplished without difficulty or fatigue. Tourist steamers, which stop *en route* for visits to tombs and temples, and the more rapid post-boats are convenient and less expensive means of reaching Luxor and Assouan.

Alexandria itself cannot be called a health-resort, but patients returning from Cairo and Upper Egypt who are anxious to avoid the hot Khamseens, may spend the month of April at Ramleh, a suburb of Alexandria, till the weather is warm enough for them to go to the Riviera or to England. The Khamseens are hot winds or sand-storms. Khamseen is the Arabic for fifty, and the winds are thus named because they are liable to blow during fifty days shortly after Easter. The wind lasts from one to three days at a time, and there are about six to twenty Khamseen days altogether in the year. The wind is very dry and hot, and laden with very fine sand which penetrates into every room and covers everything. One would think that these sand-laden winds would be very trying to consumptives, but I was surprised to hear from an English clergyman, whose lungs were very extensively diseased, that he never felt better than when the Khamseen blew; "it seemed to clear his chest." According to Dr. Sandwith the general effects are, a little excitement and stimulation of the system, a more rapid succession of

ideas, and increased action of some of the functions, followed by listlessness, headache, and languor.

This brief sketch of Egypt and its health-resorts will serve to show the nature of the climate and the kind of life that a patient or visitor may expect on his arrival. It will be noted that the Egyptian climate is far more to be depended upon than that of the Riviera, where cold and rain, and often frost, alternate with the days of sunshine, while the atmosphere is as dry as the higher Alps, without the disadvantage of cold and inaccessibility. Moreover, for many diseases the highly rarefied air of high altitudes, such as Davos and St. Moritz, is not altogether suitable.

The affections for which Egypt is best adapted may be briefly summarised as follows: Chest affections, particularly pulmonary tuberculosis, bronchitis, and asthma especially when complicated with bronchitis. Canney gives as pathological conditions in which the patient will derive great benefit: Phthisis: (1) non-erethic cases; (2) hemorrhagic cases; (3) non-acute cases of first or second stage, especially commencing deposit without very acute symptoms; (4) chronic quiescent phthisis, with or without cavities; (5) cases associated with bronchitis. Asthma, idiopathic and symptomatic; chronic bronchitis and emphysema; cases convalescent from pneumonia, pleuro-pneumonia, and pleurisy, where the structures have not returned to the normal state; chronic nasal and pharyngeal catarrh, and Eustachian deafness; cases of mental strain, breakdown, and irritability from overwork, especially such cases when associated with gout, arterio-sclerosis, fibroid kidney, atheroma, and age; cases of hemiplegia and paresis dependent upon vascular changes other than embolism, especially those cases which are associated in etiology with the preceding class; Bright's disease in all its forms other than acute, and albuminuria generally, and after pregnancy; rheumatoid arthritis, gout and associated lithiasis, and renal colic; cases of imperfect convalescence from acute specifics, such as scarlet fever, typhoid fever, influenza, etc., and especially if the kidneys have been involved; hepatic dyspepsia and lithæmia; and rheumatic fever after the attack. Sandwith has paid special attention to the question of hæmoptysis in Egypt, and finds that it is a rare symptom there.

It is hardly necessary to mention all the affections in which benefit may be expected from a visit to Egypt under proper supervision. But it is well to remember that there are a large number of conditions which are contra-indicated. Firstly, there are the very numerous patients in advanced consumption who are better at home, where they at least can have all the comforts that home alone can provide, and where they are surrounded by friends, and it is better to advise them to avoid the dangers and fatigues of a long journey only to land themselves in a hopeless condition amongst strangers. Any tendency to diarrhœa amongst the phthisical, convalescences from dysentery and typhoid, well-marked diabetes, and tuberculous kidneys are unsuitable conditions.

As regards heart affections, it is difficult to understand why angina pectoris, hypertrophy and dilatation of the heart aortic regurgitation and aneurysm should not benefit by residence in Egypt; though it is necessary, of course, for these cases to be under the same careful treatment as would be considered necessary at home.

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Progress of the Medical Sciences.

MEDICINE.

The recent literature of Epilepsy is considerable. Bleuler[1] found in the brains of twenty-six epileptics—fifteen males and eleven females—examined by him that there was always a distinct hypertrophy of the cortical neuroglia fibres lying between the pia mater and the outermost layer of tangential

[1] *München. med. Wchnschr.*, 1895, xlii. 769.

nerve-fibres. The glia fibres were increased in number and thickness, had a tendency to form bands running in a parallel direction, and often formed "whorls" around the entering vessels. This change was spread over the brain-mantle generally, but there were places in which it could not be observed: the author does not enter into the question as to whether any part of the brain was especially affected. The intensity of this *gliosis* was not proportional to the duration of the disease. In two of the patients a gross lesion was the cause of the epilepsy. Other histological changes were not certainly proved: glia cells were not increased in number, but often appeared pigmented and shrunken. Changes were noted in the ganglion cells, but it was difficult to say how much was due to epilepsy and how much to atrophy. The small pyramidal cells showed no extensive destructive changes. Disease in the vessels (atheroma and thickening of coats) was found in some, but was absent in most of the brains. For the purpose of control, fifty-four brains were examined from patients dying in the asylum of various forms of mental and nervous disease other than epilepsy. Gliosis was only present in fifteen of these, and the characters of the change were different from those found in epilepsy. The author admits that the above described changes may be concomitant with or consecutive to, and not causative of, epilepsy.

Todorski has investigated the condition of the circulation in the brain during the epileptic paroxysm.[1] The arterial and venous blood-pressure, and that of the cerebro-spinal fluid, were estimated during epileptiform attacks induced in dogs by faradic stimulation of the cortex cerebri or venous injection of absinthe. In non-curarised dogs the arterial blood-pressure rose some seconds after faradic irritation of the cortex was begun, and was accompanied by a rise in the venous pressure. In the stage of tonic contraction a continued rise of the arterial pressure occurs, whilst the venous quickly follows it and reaches its acme at the beginning of clonic contractions. The latter remains at the highest point some seconds, whilst the arterial pressure sinks earlier. The venous pressure returns to the normal at the end of coma. In animals curarised to avoid the hindrance to the circulation of the blood from muscular contractions, the same results were obtained even when the vago-sympathetic nerve was divided. The curve of pressure of the cerebro-spinal fluid follows that of the blood-pressure, and attains its highest point at the commencement of clonic contractions. It remains at this point for some time and then gradually falls—the rise often outlasting that of the blood-pressure. The author concludes from this that the rise of blood-pressure in the brain during the fit results in an increased outflow of lymph.

With regard to the question of the reflex origin of epilepsy, Dr. P. C. Knapp[2] thinks that in view of the anatomical changes

[1] *Centralbl. f. innere Med.*, 1895, xvi. 220.
[2] *Am. J. M. Sc.*, 1895, cx. 413.

(neuroglia-sclerosis) found in the brain-cortex, it is not possible to attribute epileptic attacks to astigmatism or errors of refraction, as has been done by some observers. There is some reason for believing that astigmatism is commoner in epileptics than in healthy persons, though in the latter refractive errors are very common; but even if this be so, astigmatism may be a mark of degeneracy rather than an etiological cause. A critical examination of cases of reflex epilepsy would certainly eliminate many of those reported under this head. "A considerable number of them are undoubtedly cases of hysteria, and in others the dependence of the epilepsy upon the alleged source of irritation is certainly doubtful. Nevertheless the thesis that a remote irritation may give rise to convulsive seizures is supported by the well-known experiments of Brown-Séquard, . . . and by a limited number of authentic cases in man. In most of these cases the source of the epilepsy has been of traumatic origin, and on removal of the irritation the epilepsy has ceased. These cases, however, are distinctly rare." In the cases of epilepsy coming under his own observation, he thinks that less than two per cent. could be assigned to such a cause. In a discussion[1] on this paper, Dr. G. E. de Schweinitz said that he doubted that true epilepsy is ever produced by errors in refraction, but that he was quite sure that convulsive seizures were modified and sometimes checked for long seasons by the use of proper glasses to correct such defects. The evident conclusion was that while we may not believe the extravagant assertions that have been promulgated with reference to the effect of eye-strain, we know that it must be subdued, for the same reason that the defective functions of any other organ must be put into proper order, to ensure successful treatment. Dr. Guy Hinsdale mentioned two cases of reflex epilepsy: one from carious teeth; the other from a diseased testicle, the result of an injury.

Writing of that form of epilepsy which makes its first appearance late in life, Dr. Maupaté says[2] that in only from 15 to 20 per cent. of cases, epilepsy appears after the age of 30, and is then due, not to hereditary predisposition, but to such agents as syphilis, alcoholism, malaria, and injuries. Clinically the symptoms are those of the more common form; but mental troubles are more frequent, and the onset of dementia may be rapid. The author notes the frequency of malaria amongst his patients. Sympson[3] published two cases of epilepsy first appearing in old age. In one patient the first attack occurred at the age of 73, and had the ordinary characters. There was no impairment of intelligence; and the patient lived to be 78. In the other case the first attack also came on at the age of 73; death took place at 74; and after each attack there was a

[1] *J. Nerv. & Ment. Dis.*, 1895, xxii. 266.
[2] *Ann. méd.-psych.*, Juillet, 1895, p. 53. Abstract in *Rev. neurol.*, 1895, iii. 558.
[3] *Brit. M. J.*, 1894, i. 1070.

permanent failure of intelligence. Cristiani[1] has made some observations on the late appearance of epilepsy in the insane. He had seen seven cases. This form of epilepsy occurs in very chronic cases of mental disease; the fits are generally isolated and separated by long intervals, the convulsions are general, and psychical changes of "epileptic character" are present. Pathologically he found a lepto-meningitis with sclerosis and atrophy of the cortex.

In a paper entitled "De la Nutrition chez les Épileptiques," Dr. Krainski[2] gives the results of observations on eighteen epileptics during a period of 112 days. He states that (1) the body-weight is generally diminished, sometimes increased, after the fits. This diminution of weight is greatest in the *status epilepticus*. (2) The quantity of urine is increased on the day of the fit; its specific gravity is either unaltered or diminished. (3) The quantity of uric acid is increased to an appreciable extent after the fit. For one or two days, or sometimes only for some hours, before the fit it is diminished. In some cases the onset of a fit can be foretold from the diminution in the excretion of uric acid. (4) The amount of phosphoric acid is increased after a fit, but not so rapidly as that of uric acid. (5) There is no change in the excretion of chlorides. (6) Albumen and sugar are absent. The author leaves the question open as to whether the increased excretion of uric acid is the cause or the effect of the fit.

Some two years ago Prof. Flechsig advised the treatment of epilepsy by the administration of opium in large doses for a period of six weeks. Beginning with half-a-grain, the dose is gradually increased until the patient takes fifteen grains daily, in doses of three to four grains; the maximum dose should be reached by the end of the first week, and the opium is to be stopped suddenly at the end of six weeks, and bromide, in thirty-grain doses four times a day, administered for some considerable time, and the amount then slowly diminished. Dr. Joseph Collins[3] gives a year's experience of this treatment. He tried it on fifty patients drawn from hospital, private, and dispensary practice, and sums up his conclusions as follows: "(1) The plan suggested by Flechsig is not a specific in the treatment of epilepsy. (2) In almost every case in which this plan of treatment has been tried there has been a cessation of the fits for a greater or lesser time. (3) A relapse generally occurs in a period varying from a few weeks to a few months. (4) The frequency of fits after the exhibition of opium is, for the first year at least, lessened more than one half. (5) The attacks occurring after the relapse are much less severe in character than those that the patient has been accustomed to having. (6) This plan of treatment is particularly valuable in ancient and intractable cases. (7) In recent cases of idiopathic epilepsy it cannot be

[1] *Arch. di psichiat., etc.*, xvi. i, ii. Abstract in *Rev. neurol.*, 1895, iii. 564.
[2] *Rev. neurol.*, 1895, iii. 285. [3] *Med. Rec.*, 1895, xlvi. 355.

recommended. (8) The opium plan of treatment is an important adjuvant to the bromide plan as ordinarily applied. (9) The opium acts symptomatically, and merely prepares the way for and enhances the activity of the bromides and other therapeutic measures. (10) This plan of treatment permits the use of any other substances which are known to have a beneficial action in epilepsy." Axel Holmberg[1] reports a case of epilepsy in which this treatment was carried out. The patient was put under two courses of opium. During the first course symptoms of opium poisoning appeared, and the dose had to be reduced: the patient remained free from bad fits for two months, they then recurred, and a second course was undertaken; no fits then occurred for three and a half months, when the patient had three, at which time the report concludes. I have treated three cases of severe chronic epilepsy on this plan: in all, the tolerance of the patients for the large doses of opium given was remarkable. For a variable time after the treatment the fits were much less frequent and less severe. Afterwards in one patient who suffered from very frequent attacks of *petit mal* and also from severe fits about once a week, the result has been that the severe fits are less violent and only occur occasionally, whilst the attacks of *petit mal* remain unaltered in frequency. In the second patient there is some degree of improvement in the severity and frequency of the fits. The third patient, after an interval of amelioration, became as bad as ever. This treatment could not be undertaken without close supervision of the patient, and seems most suitable for chronic cases in which the bromides alone have failed. Lui[2] reports three cases treated by this method. In two patients the fits were lessened during the opium treatment; in the third they were more frequent and intense. In one case the opium had to be discontinued for a week, owing to intolerance of the drug. The fits ceased at once when the bromide treatment was begun—in two patients, to reappear after two months, but much reduced in frequency and severity—in one case they have not recurred after four months. Lui has also treated ten patients by Bechterew's method described below, with good results as to diminution in intensity and duration of fits. He prefers this method of treatment to Flechsig's.

Bechterew[3] advocates the addition of adonis vernalis to the bromides, with the object of increasing the blood-pressure and narrowing the lumen of the vessels, seeing that in an epileptic attack vaso-motor changes, resulting in an active hyperæmia of the brain, take place. He prepares an infusion of adonis vernalis of 2–3.75 grammes of the drug in 180 c.cc. water, and adds 7.5–11.5 grammes of bromide. Of this 4–6 teaspoonfuls, or even eight teaspoonfuls, are administered daily. He claims for this

[1] *Neurol. Centralbl.*, 1895, xiv. 647.
[2] *Brit. M. J.*, 1895, ii., Epitome p. 79, from *Riv. sper. di freniat.*, xxi. ii, iii.
[3] *Neurol. Centralbl.*, 1894, xiii. 838.

combination that not infrequently the fits are checked, and in other cases are decreased in number and severity.

Walling[1] recommends the use of bromide of gold, and finds that the best effects are produced by combination with arsenic. He used a solution, ten drops of which contained gr. $\frac{1}{32}$ each of the tribromide of gold and the oxybromide of arsenic. In several cases of epilepsy this solution proved to be more efficacious than any other drug.

Moeli[2] employs atropine in a dose of $\frac{1}{120}$ grain twice a day for a period of seven to eight weeks, in epileptics in whom bromide produces no effect. The number of cases of genuine epilepsy so treated was thirty-three. During the administration of atropine the bromides were continued. In about one-third the beneficial effects of the combined bromide and atropine could be seen in diminished frequency and severity of the fits. In two men and three women, in whom previous treatment by large doses of bromide had been unsuccessful, the attacks were stopped for several weeks. This is in accord with the common experience that in certain cases of epilepsy the addition of belladonna to the bromides gives good results.

C. Féré[3] remarks on the difficulty of deciding whether an epileptic is cured unless he is placed under the closest supervision. So that it is often a matter of doubt whether to continue the administration of the bromides after the fits have ceased, especially as many patients have remained well after a year's use of the remedy. But this is a result which can neither be anticipated nor promised; and when the bromide is effectual, it should be taken continuously. The bromides act more by suspending than by curing the disease, which cannot be considered to be abolished even after a year has passed free from fits. The continued administration of bromide is of undoubted value and, if it is properly administered, is free from injurious consequences. Intolerance can only be ascertained by its effects in individual cases. Tolerance of the drug is in a very large number of patients considerable.

With regard to the more recently introduced bromides of strontium and zinc, the former seems to possess little advantage over the bromides of the alkalies, except that it is of service in cases where there is much irritability of the digestive organs, or in which the depressing effects of bromide of potassium are marked. Dr. J. Collins says[4] that there is so much uncertainty about the bromide of zinc, both in regard to its dose and action, that he leaves it out of consideration.

The same author observes with regard to antifebrin and antipyrin—the use of the latter in epilepsy, in conjunction with

[1] *Med. & Surg. Reporter*, 1895, lxxii. 121. Abstract in *J. Nerv. & Ment. Dis.*, 1895, xxii. 257.
[2] *Therap. Monatsh.*, 1894, viii. 436. Abstract in *J. Nerv. & Ment. Dis.*, *ibid.*
[3] *Rev. de méd.*, 1895. Abstract in *Centralbl. f. innere Med.*, 1895, xvi. 741.
[4] *Loc. cit.*

ammonium bromide, was introduced by Wood—that they have been more extensively employed in epilepsy than most new drugs, and in many cases with gratifying results. "The general consensus of opinion in reference to antipyrin and antifebrin is that the former is preferable, and when given in from five to ten-grain doses three to four times daily it materially enhances the value of the bromides in the treatment of idiopathic epilepsy, particularly in the less aggravated clinical forms."

Of borax—which is undoubtedly efficacious both as an aid to treatment by bromides and as a substitute for bromides in cases in which the latter have no effect, being perhaps especially valuable in controlling night attacks—Féré says[1] that it does not possess, as has been contended by some observers, therapeutic properties superior to those of the bromides. It may also give rise to accidents, not only of mild but of severe and even fatal character, and these may occur from the administration of small doses. Intestinal and cutaneous antisepsis tends to prevent them. He enumerates the following troubles from the abuse of borax: *A*. Mild—nausea, vomiting, diarrhœa; dryness of skin and of mucous membranes (loss of epithelium, fissures on lips or tongue, &c.); loss of hair and of the nails; various skin eruptions, followed by desquamation, and sometimes accompanied by cachexia, swelling, and œdema; a peculiar form of cachexia, accompanied by cutaneous troubles. Painful swelling of the sterno-mastoids, which passed off in from two to three weeks, was observed in two cases. If the drug is discontinued, all these troubles cease. *B*. Grave—nephritis, with consequent albuminuria, œdema, and uræmia. Two of his patients had uræmia: one of them died, and *post-mortem* parenchymatous nephritis was found.

Dr. Collins[2] considers the value of nitro-glycerine in epilepsy slight. In a few cases where fits of mild character or attacks of *petit mal* occurred with great frequency, I have found nitro-glycerine, given in addition to the bromides, of decided value. It should be administered three or four times a day, and the dose gradually increased up to 5 minims of 1 per cent. solution.

Dr. Cortot[3] recommends the use of oxide of zinc in doses of 1 gramme to 2½ grammes (? in twenty-four hours) for adults. He has employed it with good effect in six cases.

Dr. E. D. Bondurant[4] draws the following conclusions from observations on one hundred epileptics with mental disorder during a period of three years: (1) Borax, antipyrin, acetanilide, phenacetin, and many other so-called anti-epileptic remedies, are, with the exception of rare cases, without influence on the course of epilepsy with mental disorders. (2) β-naphthol is occasionally of service, but not more so than purgatives. (3) The bromides may postpone the attacks, but do more harm than

[1] *Semaine méd.*, 1894, xiv. 497. Abstract in *Rev. neurol.*, 1895, iii. 48. [2] *Loc. cit.*
[3] Thèse de Paris, 1894. Abstract in *Rev. neurol.*, 1895, iii. 47.
[4] *Am. J. Insan.*, 1894-5, li. 23.

good. (4) During maniacal attacks isolation may be necessary. Sedatives should very seldom or never be employed. (5) In the *status epilepticus* bleeding is the best remedy; chloral the most reliable drug.

A. Eulenburg[1] reports a case in which the cortical arm-centre was excised in a man of 28 years, who had suffered from fits since the age of 11. There were symptoms of paralysis in the face and right arm, and the fits began in the arm. After the operation, the fits remained absent for seven months; but then mild attacks began to return. Eulenburg observes that the so-called traumatic and partial epilepsies are not easy to identify, and do not offer certain prospect of cure by operation. On the other hand, cases of idiopathic epilepsy are not to be altogether excluded from surgical treatment. The failure of operative procedures rests less on insufficient diagnosis and technique than on the limits set by the nature of the disease.

The following case, quoted by E. Leyden, shows the necessity, in the investigation of what appear to be undoubted cases of idiopathic epilepsy, of enquiry as to previous injury, and of carefully examining the skull for evidence of such past injuries, which may have occurred many years before and have been forgotten. A man of 30 years of age[2] who had had a fracture of the right side of the skull when 4 years old, was suddenly seized in 1892 with left-sided convulsions: these had recurred since. In 1894 severe pain came on in the right side of the head, with numbness and weakness in the left arm and leg, followed by paralysis of these limbs. He became drowsy, and, as an area of depression was discovered in the bone over the right central convolutions, he was trephined over this spot. Nothing was found but some thickening of the connective tissues between the bone and the dura mater. The symptoms were quickly relieved after the operation, slight dragging of the left leg being the only symptom left three months afterwards. It is especially noteworthy in this case that the epileptiform attacks first came on twenty-four years after the accident, and that with such slight anatomical changes the clinical symptoms were so severe and so promptly relieved by operation.

J. Michell Clarke.

SURGERY.

The surgical treatment of Graves's disease has been much discussed lately, and a consensus of opinion obtains that much can be done by surgical means for the relief of this affection. One of the most scientific articles on this subject was that by T. Wette,[3] who defines Graves's disease as a reflex neurosis

[1] *Berl. klin. Wchnschr.*, 1895. Abstract in *Centralbl. f. innere Med.*, 1895, xvi. 670.
[2] *Berl. klin. Wchnschr.*, 1894, xxxi. 839. Abstract in *Centralbl. f. innere Med.*, 1895, xvi. 48.
[3] *Arch. f. klin. Chir.*, 1892, xliv. 652, 764.

of the terminal branches of the sympathetic in the thyroid gland, the exciting agent being the metabolism of the gland. Goitre, in connection with exophthalmos and palpitation of the heart, are the cardinal symptoms for the diagnosis of this disease. This trio of symptoms is ascribed to the effect of a pathological innervation of the sympathetic. The goitre interferes with the normal course of the processes taking place in the gland, producing those alterations which react on the nerve and vessels communicating with it. The sympathetic being known to extend its ramifications to the smooth muscles of the orbit, would produce the exophthalmos. As the same nerve also innervates the fibres of the heart, the palpitation of the heart may be explained in the same manner.

The conservative treatment of exophthalmic goitre, by diet, massage, electricity, application of iodine, &c., having proved at the most palliative, Wette advocates surgical interference as the only treatment indicated. Starting from the hypothesis that the goitre is the *cause* and not the consequence of the alarming symptoms of Graves's disease, he considers the extirpation of the swelling alone capable of producing radical results. But as the total extirpation of the thyroid gland has, in many cases, had very disastrous effects, and since the physiological importance of this gland in the economy of the organism has become manifest, the operations at present are confined to the removal of two-thirds or three-fourths of the thyroid gland, according to its position and connection with the surrounding organs. Riedel has lately improved on the old form of operation by making an arched incision extending from one sterno-mastoid to the other. This has the advantage of the subsequent scar being hidden by the clothing, and of exposing both sides of the swelling at once to the view of the operator. The great danger of these operations is the after-bleeding, which in some cases has proved fatal. Great care, therefore, should be taken in firmly ligaturing the blood-vessels. Another danger is the laceration of the vagus, which has often been enclosed in the goitre, and its normal position altered by the presence of the swelling.

Among the numerous operations for goitre performed by Riedel from July, 1882, to November, 1891, three were for exophthalmic goitre, and were all successful. The following description is given of the most interesting of these cases. Patient a lady, aged forty-nine. The goitre had developed twenty-five years before, and had been treated for several years with iodine, with no other result than the disagreeable effect of the drug. Severe palpitation of the heart, even in repose. Exophthalmos very pronounced. Nervous symptoms, tremor, sleeplessness, alternate heat and cold. The goitre had attained a most extraordinary size, and extended in both directions from the hyoid bone to the clavicle. The sterno-mastoid had been driven from its normal position. The larynx and trachea were entirely covered by the gland. By intra-glandular enucleation,

on the right side, a nodule the size of a man's fist was removed. The growth proved parenchymatous, intermixed with fibres and calcareous matter. On the left side and in the centre, extirpation of several smaller nodules followed, while one, which extended under the clavicle, was excised. Before the operation the frequency of the pulse had been 160; directly after, it fell to 84. As soon as the growth was removed the respiration became easy and has remained so, and no recurrence of the palpitation was experienced. The wound healed by first intention, but pleurisy and bronchitis supervened, which kept the patient very weak and retarded recovery. When six months after the operation the patient was seen again she felt perfectly well. The exophthalmos had entirely disappeared. A slight nervousness was the only trouble remaining.

In support of his theory that the enlargement of the thyroid causes the symptoms of Graves's disease, Wette reports two cases from literature, one described by Professor Hack,[1] and another by Professor Hopmann,[2] in which all the symptoms of exophthalmic goitre were proved to be caused by a diseased state of the nose, disappearing when the trouble in the nose had been remedied. He further points out that the atypical symptoms of Graves's disease, the nervous manifestations such as hysteria, hypochondria, epilepsy, tremor, sleeplessness, are also found in cases in which the exophthalmos is wanting, and that these nervous symptoms are caused by the presence of the goitre. These symptoms are at present ascribed to a toxin produced by the pathological thyroid gland which finds its way into the system. In conclusion, Wette sums up as follows:—

1. The principal and surest treatment of Graves's disease is the partial removal of the goitre.
2. The goitre is one of the real causes of Graves's disease:
   A. Of its typical symptoms, exophthalmos and palpitation of the heart, either by pressure on the sympathetic or in consequence of the reflex neurosis of this nerve produced by its terminal branches in the thyroid gland.
   B. Of the complex of atypical nervous symptoms, the consequence of a general intoxication of the body by chemical metabolism in the pathological thyroid gland.

Professor Mikulicz,[3] of Breslau, says that operative interference in Graves's disease is gaining ground every day, and no one at present doubts the efficacy of this treatment. He has operated on eleven cases; in all of these tachycardia existed in a very marked degree, and five patients presented serious dyspnœa. All survived the operation, which twice consisted in ligature of the thyroid arteries, while in the other nine cases extirpation was practised. Of the patients operated on, six were completely

[1] *Deutsche med. Wchnschr.*, 1886, xii. 425. [2] *Berl. klin. Wchnschr.*, 1888, xxv. 850.
[3] *Med. Week*, 1895, iii. 194.

cured, and in four there was considerable improvement; in one case the improvement was but slight, but in this instance the operation consisted merely in ligature of the thyroid arteries of one side. In the case of one patient, treated by unilateral resection, there was at first great improvement in the morbid symptoms, but the result proved to be ephemeral, for in a short time the tumour on the opposite side developed to such an extent as to compress the trachea. Five months later this side was also extirpated with satisfactory results. The effects of the operation appear much the same, no matter whether the operation be ligature, enucleation, or resection. Operation is by no means free from danger. Although no death occurred in any of his cases, yet he twice met with alarming symptoms, especially rapid pulse and a dyspnœa so intense that he expected to have recourse to tracheotomy. The effects of operation are manifested within a period varying between a few weeks and several months; but whether improvement takes place at an early or remote period, the patients are invariably satisfied with the results, and justly so. It takes a long time for the cardiac disturbances to subside and the exophthalmos to disappear, but this is not surprising. The favourable effect of operation on Graves's disease has been explained in various ways. It cannot be attributed to relief of pressure on the trachea, for dyspnœa is often absent. Nor is the theory of the cervical sympathetic being injuriously influenced by the tumour tenable. It is more likely that there is auto-intoxication by the products of secretion of the hypertrophied thyroid gland, while it is more probable still that the disease begins as a neurosis, and that the symptoms are gradually aggravated by exaggerated secretion of this organ. Professor Kocher,[1] of Berne, considers that the operation of extirpation of goitre in Graves's disease is dangerous, for he has lost three cases; and he has since had recourse to ligature of the thyroid arteries, taking care never to tie more than three of these vessels, because in one case in which he ligated all four arteries the operation was followed by symptoms of cachexia. Professor Krönlein,[2] of Zurich, prefers extirpation of the gland, which he has performed successfully in eight cases. The exophthalmos persisted in one case, but the patient was, nevertheless, well satisfied with the result of the operation. Professor Trendelenburg,[3] of Bonn, has, in some cases of Graves's disease, had recourse to ligature of the thyroid arteries, invariably tying all four, in two sittings, at an interval of a few weeks. He has never met with symptoms of cachexia strumipriva. Professor Rydygier,[4] of Cracow, has practised ligature in twenty-two cases of Graves's disease. He has tied all four arteries without ever noticing any symptoms of cachexia.

Albert H. Freiberg[5] gives statistics of forty-one operations for exophthalmic goitre, with only two deaths; three cases were

[1] *Med. Week*, 1895, iii. 194. [2] *Ibid.* [3] *Ibid.*
[4] *Ibid.*, 195. [5] *Med. News*, 1893, lxiii. 225.

not improved by the operation, but in the other cases, the result varied from complete cure to a more or less partial improvement. For the sake of a better appreciation of the cases he divides them into three classes from the history given. He classes as "surgical" those cases in which the nervous symptoms seemed directly dependent upon the size and growth of the goitre. He considers as "true Graves's disease" only such cases in which the goitre was not the first of the three typical symptoms (tachycardia, goitre, and exophthalmos) to appear, but in which these three symptoms were all present. In the third class, which he describes as "doubtful," he places the remaining cases, where the history reported would not warrant his including them even under such arbitrary heads as the others. Classed as cases of "true Graves's disease" there were then eleven, of which seven were reported cured; and as cases of "surgical Graves's disease" were ten, of which nine were cured; and as "doubtful cases" were twenty, of which nine were cured. If we assume the doubtful cases to have been instances of true Graves's disease, we have thirty-one cases, of which sixteen were cured, that is about fifty per cent. The duration of the cure must greatly interest us. Unfortunately there is nothing mentioned of this in the reports. Only once is there mention of recurrence, and this was not in a case of "true Graves's disease." Three cases are reported as being well five years or more after operation, two after three years, two after two years, three after one and a half years, one after seven months, and one after six months.

James J. Putnam[1] records an operation for Graves's disease done by Dr. J. C. Warren, partly at Dr. Putnam's suggestion, on a patient previously under treatment in the neurological department of the Massachusetts General Hospital. The patient was an unmarried woman, twenty-nine years old. She had never been robust, and had had a number of attacks of protracted vomiting at different times in her life. The "lump in the neck" had been noticed for a year, and the prominence of the eyes and the palpitation were noticed a few months after the enlargement of the neck. When seen, all the symptoms of a moderately severe form of Graves's disease were present—viz., tachycardia, exophthalmos, tremor, nervous agitation, dyspnœa; and besides these, there was an unusual amount of muscular twitching of choreiform character. There was a systolic murmur in the mitral area, transmitted towards the axilla; and the pulmonic second sound was accentuated. In the neck was a soft non-pulsating tumour, descending slightly on swallowing, and this extended from the sternum to the thyroid cartilage, and laterally to the middle of the sterno-mastoid muscle. A loud vascular murmur was heard over the tumour when the stethoscope was applied. Thyroidectomy was performed by Dr. Warren, on February 2nd, 1893. There was a large amount

[1] *J. Nerv. & Ment. Dis.*, 1893, xx. 799.

of bleeding, but no more than is often met with in such cases. After a large plexus of veins had been clamped and tied, the right lobe of the thyroid was shelled out with the fingers, the isthmus clamped, and the right lobe cut off with the scissors. A silk ligature was passed around the isthmus, near the median line, and tied. Then the isthmus was cut off close to the ligature. The pulse and respiration were bad during the operation, and subcutaneous injections of brandy and strychnia were given. During the operation the pulse ran up to 180 and 200, and the prostration was extreme, though there was nothing in the operation itself to cause it. On the afternoon after the operation the pulse was 185, the temperature 104°, and there was great difficulty in breathing. For the next four days she remained in what seemed to be a critical condition, but she gradually improved, and three months afterwards her condition is described as much better than before the operation, but by no means well. The pulse had not dropped below 108, and the patient was anæmic. The gland, after removal, was examined and found to be destitute of colloid. The follicles contained cubical epithelium instead of the normal flat epithelium.

Dr. Putnam points out that there is some liability to sudden death after operation for Graves's disease as well as for other forms of goitre; and this danger is the more alarming because we do not fully understand the cause of the fatal result, nor how to avoid it. The first few days after operation for goitre of any kind are liable to be a distressing period to the patient and an anxious one for the surgeon; but if this period is tided over, a favourable result may be looked for. He gives notes of fifty-one cases where thyroidectomy was performed for Graves's disease, with only four deaths, and in most of the other cases a partial or complete cure resulted; but he points out that these results must not be entirely attributed to the operation, since prolonged rest is always beneficial, and the influence of time is often of itself useful and even curative.

The same author[1] gives notes of two additional cases of thyroidectomy for Graves's disease. The first was a girl, sixteen years old, who had been ill for four years with the signs and symptoms of Graves's disease in a typical form; goitre, exophthalmos, tachycardia, tremor, suffusion of the face, and mental irritability being all present. The right half of the thyroid was removed by Dr. J. C. Warren, on February 2nd, 1894; but although the wound did well, yet restlessness and delirium supervened, and she died a week afterwards, the temperature having risen to 105°, and the pulse to 165. The second case was a young woman, twenty years of age, who was operated on by Dr. Lossander, of Stockholm. Here the result of the operation was excellent at first, but a relapse occurred after two years.

W. H. HARSANT.

[1] *J. Nerv. & Ment. Dis.*, 1894, xxi. 359.

LARYNGOLOGY.

The surgical treatment of laryngeal tuberculosis formed the subject of a discussion at the British Laryngological and Otological Association at its meeting in July, 1895.[1]

Krause's remarks may be thus summed up: (1) *The choice of cases.* He does not advise extreme carefulness. Ease can be given even in the most advanced or desperate cases, and neither high fever nor great debility need prevent our giving the patient this relief. He quotes a very bad case in which the excision of large pieces from the ary-epiglottic and pharyngo-epiglottic folds was followed by remarkable benefit, owing to swallowing becoming practically painless. (2) *The performance of the operation.*—The parts most diseased, and the disease of which most endangers nutrition or respiration, should be attacked first. Gradually the whole of the diseased structures can be cut away, not excepting the epiglottis or the arytenoid cartilages. Deep and thorough operation is necessary, and after it lactic acid, well rubbed into the wounded surface, is the best substance that can be used. Sulphoricinate of phenol, as introduced by Ruault, has a similar but slower effect than lactic acid. (3) *Relapses.*—When strength is well preserved and tendency to cicatrisation is observed we get lasting results as often as in the lungs. Krause has seen cases in which the larynx has remained well, although the disease in the lungs has continuously progressed. In fact, as a rule, after the introduction of the surgical treatment laryngeal relapses are rarer than pulmonary ones.

Heryng's remarks may be summarised as follows: (1) Laryngeal phthisis can heal by itself without any local treatment. The ulcers on the vocal cords and the posterior wall of the larynx heal most frequently; very rarely those more serious cases, in which the infiltration and proliferation products are attended with deep ulceration, as also those cases in which the disease has spread to the cartilage and has led to deep disintegration. (2) The objects of the treatment are: First and most important, the relief of the dysphagia; secondly, the relief of stenosis; thirdly, the cure of aphonia. (3) *Surgical treatment is indicated:* (*a*) In tubercular tumours of the epiglottis. (*b*) In circumscribed chronic tumour-like infiltrations of the posterior wall of the larynx, which show little inclination to break down. (*c*) In chronic tumours resting on an inflammatory base, surrounded with proliferation products, which resist all other methods of treatment. (*d*) In partial disease of the larynx, when epiglottis, false cords, and lateral ligaments are affected. (4) *Surgical treatment is contra-indicated:* (*a*) In advanced phthisis of the lungs, with hectic and wasting. (*b*) In diffuse miliary tubercle of the larynx or, rather, of the larynx and pharynx. (*c*) In all cachetic conditions. (*d*) In severe stenosis of the

[1] *J. Laryngol.*, 1895, ix. 572.

larynx, caused by inflammatory swelling of the affected parts. In these cases tracheotomy must be performed as soon as possible. (*e*) In patients exhibiting fear and nervous excitability, mistrust of the physician, and who are always changing their doctor, especially those whose condition promises little hope of recovery. (5) With the proper application of cocaine, the operation itself is not painful. Submucous injection of cocaine is hardly ever necessary. (6) Pyoktanin (one to two per cent. solution) has proved a very good means of preventing inflammation in the parts operated on. It must be applied to the surface of the wound twice a day. (7) Recurrence takes place frequently at the place operated on, sometimes at a little distance from it. It is explained not only by inaccessibility of certain parts of the larynx to our instruments, but also by the imperfect performance of the operation. In most cases, however, the recurrence is due to the disease spreading to the lungs, and the insufficient power of resistance to the infection. (8) Nearly the whole of the upper part of the larynx is accessible to surgical treatment by suitable instruments. It should be a rule in surgical treatment to excise as much of the affected parts as possible at one sitting. The double curette has the advantage over the single curette in certain cases. (9) It must be explained to the patients and their friends, before the operation, that the dysphagia cannot be removed at once by surgical interference; that it is very often increased for a few days, and, further, that the operation does not effect a radical cure. It is also advisable to tell the patients that the radical removal of the accessible parts is very seldom successful in one sitting; that, in spite of a successful operation, the disease of the larynx may return, and that the physician can give no guarantee of ultimate restoration to health. (10) The conditions of success of the surgical treatment in general depend: (*a*) On the local character of the affection, its extent and its nature. (*b*) On the general state of the patient, his nutrition and his strength. (*c*) On the anatomical character of the affection of the lungs. (*d*) On the age of the patient, his constitution, his profession, his material circumstances, his temperament, and his character. (*e*) On the thoroughness of the operation itself and the skill of the operator, as well as on the localisation of the processes in such places where it is technically possible to perform a radical extirpation of the infected tissues. (*f*) On the careful after-treatment, and the capability of the patient to submit to a prolonged dietetic and climatic treatment.

* * * *

Gerhardt[1] says we can obtain important information by external examination of the larynx and trachea. During dyspnœa, if the larynx move only slightly, the cause is to be sought in the trachea; if more extensively, the stenosis is in

[1] *J. Laryngol.*, 1895, ix. 329.

the larynx. In laryngeal croup the neck is bent backwards so that the bodies of the vertebræ may press the cartilages of the larynx flat; in stenosis of the trachea the chin approaches the breast. In tracheal stenosis there is expiratory stridor; in laryngeal stenosis, inspiratory stridor. The author does not look upon tracheal tugging as a characteristic symptom of aneurysm. In a case of aneurysm of the ascending aorta he observed distinct interruption of the tone during prolonged phonation. If a finger be placed on each side of the larynx, between the thyroid and cricoid cartilage, the action of the crico-thyroid is felt. If the contraction be absent on one side, a paresis is present, and we can determine whether this is of central or peripheral origin by electrical examination. If the finger be pushed higher, towards the thyroid cartilage, the vibrations of the vocal cords are felt; in this way a paralysis of the recurrent can be diagnosed in many cases, and the presence of extensive ulcers and tumours be established. The voice can sometimes be improved by pressing on the thyroid cartilage, especially by compression in hysterical paresis. If "ah" or "oh" can be produced by pressing on the thorax—passive voice production—then we have probably to deal with a double abductor paralysis. Abnormal movements of one vocal cord can also be felt with the finger placed behind the upper cornu of the thyroid. Gerhardt refers to a case of sarcoma of the leg, and of the right and left lung and pleura, in which there was giddiness on standing erect. With the laryngoscope, tremor-like adduction movements of the vocal cords were seen during expiration, which could also be felt externally. The *post-mortem* examination revealed a sarcoma metastasis in the frontal bone which pressed on the frontal convolutions.

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At the Laryngological Society of London on October 10th, 1894, Lake [1] showed two cases of lupus of the nose and palate treated by thyroid extract. One was a boy, 11 years of age, who had suffered for fourteen months, and whose soft palate and posterior pillars were also affected. He had taken 7½ grains of thyroid extract daily for three months, and was very much improved. The second case was a girl, 16 years old, who had been affected for three years. She took 17½ grains daily for the same period of time, and was very much improved.

* * * *

Spencer Watson [2] relates particulars of a case in which tachycardia was associated with, and apparently largely dependent on, nasal polypi. Removal of the growths removed all cardiac trouble, which had not returned within three months of the operation.

I have treated two cases of epilepsy, in one of which there were associated nasal polypi, the removal of which greatly

[1] *J. Laryngol.*, 1895, ix. 165. [2] *Brit. M. J.*, 1895, ii. 1097.

ameliorated the condition; in fact, practically no fits occurred until recurrence of the growth, further operation on which again stopped them. In the other case, snaring off pieces of the greatly hypertrophied inferior turbinated bodies, and the application of the galvano-cautery, completely stopped the fits for eight months.

It is, therefore, of importance to examine the nose for possible distribution of reflex disturbance.

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Milligan [1] draws attention to the question of vocal defects amongst school board teachers, with special reference to the occurrence of teachers' nodes. All who are examining the larynx in teachers and other voice users will agree that this is a most important matter. Milligan rightly insists on the necessity of raising the age when girls begin the severe vocal duties of pupil teachers. Better ventilation of class-rooms; having the benches placed in tiers one above the other, so that the teacher speaks with head erect; and, above all things, efficient teaching of voice-production before the girls commence their work are all prophylactics. When the larynx is congested and nodes are present, physiological rest, the local application of weak astringents, and the nightly application of Leiter's cold coil for an hour at a time, are all valuable. If the nodes are large enough the galvano-cautery, or even the forceps, may be used to remove them.

In this department of work great mischief is being done throughout the country. The female teachers and, to a less extent, the males are, as I know from my own practice, in many cases incapacitated from following their occupation. The main causes of the serious laryngeal mischief that develops are faulty methods of voice-production, too large classes, and ill-ventilated rooms. Prevention ought not to be difficult; cure is, in many cases, nearly or quite impossible.

BARCLAY J. BARON.

OTOLOGY.

Professor Urbantschitsch, of Vienna, has lately drawn attention [2] to a new method of developing the hearing power of deaf-mute children by a systematic course of acoustic gymnastics. He has now given this method a thorough trial, and has been much surprised and gratified by the results obtained. He begins by practising the simplest voice sounds in one ear of the child for five or ten minutes every day. He next practises on the other ear, proceeding gradually to simple words and then to sentences. After a little the patient is exercised in other voices, because he found that deaf-mutes could only at first understand

[1] *Brit. M. J.*, 1895, ii. 1097.
[2] *Wien. klin. Wchnschr.*, 1893, vi. 525, and 1894, vii. 343, 368.

one person. This is in accordance with the point raised by Bezold that some deaf-mutes are without hearing for certain groups of sound, of greater or less extent. When patients hear a certain group of sounds he gradually extends this in both directions. He then practises with tuning-forks, and especially with a small instrument of five and a half octaves, which is a kind of harmonium. This is valuable because the sound lasts longer than that of a tuning-fork. He begins with one note of the harmonium, and then presses down two notes together, in order that the patient may learn to differentiate tones. These practices are to be continued until the sense of hearing is so developed that speech is understood. If the exercises be interrupted the patient sinks back and relapses, but he can practise by himself with the harmonium. Urbantschitsch has found a total word deafness to be rare in deaf-mutes. Even in those patients who appear so at first, a certain hearing of one tone may be found with patient care, and from this he may be led on first to a vowel sound and then to words. This may take place more quickly in one ear than in the other. Some patients cannot be got beyond the first stage, but others may be led on further. The mental condition of the patient has great influence. If this is very bad we must first raise the mental level by some other means of education. When the patient has got to words it is important to practise with those words to which he attaches a definite meaning, such as those things which he is habitually handling, as fork, spoon, &c. Professor Urbantschitsch records some cases illustrating the results of his method, such as a girl, nine years old, who was totally deaf from birth, but after she had practised this method four times a week for ten months could hear words and put together easy sentences; also a boy, aged fifteen, who became totally deaf in his fifth year from meningitis; he practised these exercises daily for ten minutes, and in six months he could understand all sounds and could hear words and sentences and his own voice.

Dr. J. Steele Barnes, of Milwaukee, publishes an interesting article on the same subject,[1] in which he points out that the idea of aural gymnastics in the treatment of deaf-mutism did not originate with Professor Urbantschitsch, but, so far as we know, with Bewus[2] over a century and a half ago. Later, Itard[3] in 1821, and Toynbee[4] in 1860, reported success with cases treated by similar methods; but to Urbantschitsch we are indebted for developing the idea and proving its great value. His attention was called to what was possible of accomplishment with the method by his remarkable success in the case of a deaf-mute boy. He says:[5] "Several years ago I obtained a surprising improvement of hearing by systematic acoustic

[1] *Ann. Ophth. & Otol.*, 1895, iv. 390.
[2] Beck. *Ohrenheilkunde*, 1827, p. 73.
[3] *Traité des Maladies de l'Oreille*, ii. 476. [4] *Diseases of the Ear.*
[5] *Wien. klin. Wchnschr.*, 1893, vi. 525.

gymnastics in the case of a deaf-mute boy referred to me for treatment. At first he was able to hear only vowels and single syllables spoken loudly in his ear; later, after a year, he could understand complete sentences spoken in a moderately loud voice and finally was able to receive ordinary, not deaf-mute instruction." There is nothing extraordinary or intricate in the method. It is virtually a vocal training of the auditory nerve, whereby a gradual irritability of the nerve for sound waves is set up. It is, as it were, a bringing into life and activity a hitherto lifeless nerve. At the Vienna Policlinic, Professor Urbantschitsch devotes an hour daily to the training of deaf-mutes by acoustic gymnastics, and it was there Dr. Barnes's good fortune to receive personal instruction and witness the surprising results obtained. It was indeed interesting to note the gradually increasing perception of sound in ears that were at first apparently totally deaf. Instruction begins with the vowels. Two are selected, usually A and O, as they are the most readily understood. The one to be used is first indicated to the patient by the lips, and then in a loud and prolonged voice is spoken directly into the ear. The patient in the beginning may not hear a sound, but persistent and continued effort will, even sometimes at the first sitting, enable him to arrive at a differentiation of two sounds. While it may not be a complete differentiation, the sound of A conveys a different impression to the mind than the sound of E as shown by the effort of the patient to repeat them. Again, this result may not be obtained until after several sittings. As soon as the differentiation of the vowels is mastered consonants are added to them, gradually increasing to long syllables, then to words, and finally complete sentences. As progress is made the distance from the ear at which the exercise is conducted may also be gradually increased, and after a few sittings it is best to dispense with the lip method, making the exercise purely acoustic.

While perception of sound is essentially necessary to gaining any progress in a case, conception of sound makes the perception easier, exerting a marked influence upon the rapidity of improvement. One may have perception long before he has any conception of a sound, but the sooner a sound conveys intelligence to the brain the quicker and more readily is that sound always distinguished. Therefore, from the very beginning the attempt should be made to convey to the patient a meaning with every sound, to have him realise that every sound has an intelligent expression for the mind. Regarding the duration and frequency of the sittings, Urbantschitsch has found that short, continued practising of from five to ten minutes gives the best results. Practice should be daily at first, gradually increasing in frequency rather than lengthening the duration.

Dr. M. A. Goldstein, of Saint Louis, has an article[1] very

[1] *Arch. Otol.*, 1895, xxiv. 50.

warmly praising the method, and describing what he has personally witnessed of the marked improvement taking place from month to month. He has found that beneficial results from the use of this system are equally distributed in cases of *congenital* or *acquired* deafness. *Age* also seems to offer no obstacle to success. In the deaf-mute asylums of Austria practical tests have yielded most gratifying results. For nearly one year these exercises have been combined with the regular system of instruction, and the progress of the pupils, as indicated by recent tabulated reports, has been remarkable. A number of these pupils, to whom the special instruction had been given, were presented before the Society of Physicians, in Vienna, April 27th last, and the fact that these congenitally deaf pupils could hear the speaker at distances varying from several inches to ten feet, without the aid of lip-reading or signs, was in itself the most brilliant testimony of success.

W. H. HARSANT.

Reviews of Books.

Essays in Heart and Lung Disease. By ARTHUR FOXWELL, M.D. Pp. xiv., 476. London: CHARLES GRIFFIN AND COMPANY, LTD. 1895.

These essays have for the most part been previously published, but are here collected in book form and revised up to date. They are mostly on various points relating to pulmonary phthisis, and they give us a modern author's views on the prognosis and curability of the disease by various antiseptic and climatic modes of treatment. He concludes his account of hæmoptysis with the admonition: "Above all things let the thought of morphia be ever in your minds." He adduces much evidence in favour of iodoform in tubercular disease, and apparently prefers it to creasote and guaiacol, with which drugs his experience has been singularly unfortunate; for he states that "creasote acts as a gastric irritant in any quantity beyond a daily dose of ♏ 6." We cannot but think that a further experience of such drugs will greatly modify the views expressed on page 426.

The condition of the heart in debility and anæmia is a subject to which Dr. Foxwell has given much attention. His Ingleby lectures on this subject are reproduced (pp. 299 to 374), and are well worthy of careful study.

The Schott Methods of the Treatment of Chronic Diseases of the Heart. By W. BEZLY THORNE, M.D. Pp. 80. London: J. & A. CHURCHILL. 1895.

In this book the treatment of heart diseases as conducted at Nauheim is carefully and lucidly described. A method of preparing artificial baths is also given, in addition to well-drawn illustrations of the various movements.

From actual observation at Nauheim we cannot doubt the value of the system in certain cases. The improvement indeed may be remarkable, but is possibly of not such wide application as some accounts might lead us to suppose. While no doubt valvular affections may materially improve, the cases most benefited appear to be cases of hypertrophy of the heart without valvular disease. At the end of the book Dr. Thorne gives ten illustrative cases, the majority of which appear to be of this nature.

We think that too great stress should not be laid upon the immediate reduction of cardiac dulness that follows immersion in the saline baths or after exercises. This we believe to indicate, not diminution in the size of the heart, but lung-distension. Dr. Thorne gives a diagram of the reduction in dulness in the case of a healthy heart after immersion in a saline bath. One generally considers that a healthy heart empties itself completely during systole; and if such be the case, a tepid bath must be unable to produce sufficiently great contraction to be detected as diminution of normal dulness. We examined a case before, during, and after a bath at Nauheim, and were surprised to find that marked diminution in the dulness took place. The impulse, however, remained beating in precisely the same spot—a fact that seemed to point conclusively to lung-expansion, not heart-contraction, as the reason for the diminution.

While, however, this detail is criticised, it must be again stated that the great benefit many patients receive cannot be doubted. The system is a most valuable addition to cardiac therapeutics, which the medical profession in England has to thank Dr. Thorne for bringing to their notice.

Indigestion. By GEORGE HERSCHELL, M.D. Second Edition. Pp. viii., 343. London: BAILLIÈRE, TINDALL AND COX. 1895.

It was only to be expected that a second edition of this book should have been quickly demanded. It gives a concise account of the modern methods of study and treatment of the disorders of the digestive apparatus, and is likely to be of much service to the busy practitioner in dealing with this frequent and troublesome group of conditions.

We are gratified to find that in the treatment of ulcer of the stomach the author trusts, during the first stage, entirely to the use of nutrient enemata; but we are astonished to note that this stage lasts "from four days to a week" only, whereas we should expect that it might very advantageously be lengthened to "as long as the patient can be induced to submit." We have searched, but in vain, for an analysis of the results of modern methods of the treatment of ulcer: these must show a great improvement on the figures given in the older text-books before the habitual use of nutrient enemata and the process of peptonisation became the rule.

Syphilis. By ALFRED COOPER. Second Edition. Edited by EDWARD COTTERELL. Pp. xx., 480. London: J. & A. CHURCHILL. 1895.

We gladly welcome a second edition of the valuable work issued eleven years ago by Mr. Alfred Cooper, who has had exceptional opportunities of gaining a practical experience of the subject on which he writes. The value of the work is further enhanced by being edited by Mr. Cotterell, who from his association with the out-patient department of the London Lock Hospital, is able to deal with the subject as an authority.

Since the publication of the first edition, it has been found necessary to completely revise all the chapters and rewrite several of them. That on "Syphilis and Insanity," in which acknowledgment is made of considerable indebtedness to the writings of Dr. G. H. Savage, is entirely new and is a very valuable one.

The history and geographical distribution of syphilis are amply considered and will be read with much interest. We were particularly pleased with the illustrations, which form a new feature of this edition. Many of them are admirable examples of colour printing, and altogether the typographical dress in which the book is presented is a most attractive one, doing the publishers the greatest possible credit.

We have no hesitation in saying that this work should prove generally interesting, and of very great value to those who have to give practical attention to the subject.

The Deformities of the Human Foot. By W. J. WALSHAM, M.B., C.M., and WILLIAM KENT HUGHES, M.B. Pp. vi., 550. London: BAILLIÈRE, TINDALL AND COX. 1895.

This work is mainly a record of thirteen years experience by Mr. Walsham in the Orthopædic Department at St. Bartholomew's Hospital, in which some seven hundred to eight hundred patients are treated annually. He has been assisted by Mr.

Kent Hughes, who was formerly his senior dresser in the department; the latter having taken numerous photographs from patients and from casts and specimens in the museum. The result is a useful and practical manual, containing a great deal of valuable information on a very important subject.

The greatest part of the book is naturally devoted to talipes, and no less than a fourth of the whole treats of one variety of talipes, viz., congenital talipes varus. As regards etiology, four theories are alluded to, viz.: (1) the spasmodic muscular contraction theory; (2) the mechanical theory; (3) the arrest of development theory; (4) the defect-in-the-germ theory. Of these the authors consider that the mechanical is the most tenable, and we think they give very good reasons for their opinion. Much space is devoted to the treatment of this affection; and the various mechanical appliances are fully and plainly described. In the treatment of the more severe forms of the deformity, various cutting operations are described, including Phelps's method by open incision on the inner side, and the numerous tarsotomies and tarsectomies, which have been advocated by others; but we are glad to notice that the authors rely mainly upon conservative measures for the treatment of all but a few inveterate cases.

English authors have been freely drawn upon throughout the work; but very little notice is taken of foreign workers. One or two French writers are alluded to, but German literature is apparently ignored. The result is that the work is by no means complete as a book of reference, and cannot be relied upon as a scientific attempt to deal with the subject; but it will serve a useful purpose as a practical guide to modern diagnosis and treatment.

A Manual of Gynæcological Practice. By Dr. A. DÜHRSSEN. Translated and edited from the fourth German Edition by JOHN W. TAYLOR and FREDERICK EDGE, M.D. Pp. xviii., 241. London: H. K. LEWIS. 1895.

This is an excellent little manual for students and practitioners, where in concise and intelligent phraseology we may read with profit the outlines of this branch of professional work. The details of manipulation are clearly expressed; and an account is given of various vaginal operations involving the opening of the peritoneal cavity such as few English text-books contain. This operation, which the author has done so much to bring to perfection, is frequently referred to as vaginal "laparotomy;" but we think a better expression would be vaginal "cœliotomy," a term which is used in other parts of the book.

The mode of expression is occasionally rather loose, and we have noticed some misprints. "Fæcal" is spelt "fœcal" on page 22, "sack" appears for "sac" twice on page 63, and "descencus"

is seen on page 125. The section beginning at page 142 might have been shortened with advantage by omitting those parts of the description of vaginal cœliotomy which have already been given in a previous chapter (pages 54 *et seq.*). The book is well illustrated by numerous plates which elucidate the text, and we can confidently recommend it.

Infancy and Infant-Rearing. By JOHN BENJAMIN HELLIER, M.D. Pp. x., 121. London: CHARLES GRIFFIN & COMPANY, LIMITED. 1895.

Dr. Hellier has brought out a thoroughly readable book in this small volume; but has attempted too much in trying to suit at the same time the requirements of the nurse, medical student, and practitioner. From considerable experience gained in reviewing manuals of this kind, we believe that it is impossible for an author to express himself in sufficient detail both to satisfy the practitioner and at the same time, by avoiding the use of scientific terms, to make his book suitable for a nurse. Practitioners should find nothing to complain of in this work, but we can well imagine a nurse finding it too full of words of which she does not know the full meaning. The style is good and clear, and the author's views are well expressed. Some of the diagrams and tables are new, but we recognise a few old friends. The index is full and correct.

The Surgical Diseases of Children, and their Treatment by Modern Methods. By D'ARCY POWER, M.B. Pp. xvi., 548. London: H. K. LEWIS. 1895.

Practical experience and careful attention to the views of other writers—two essential qualifications for the author of any book on surgery or medicine—are well illustrated in the work before us. Its general excellence is very high, and special value attaches to certain portions of it. The mechanical portion of the work is good, though we did not expect to see so many misprints, amongst which are the following:—at page 177, line 22, for "femur" read "humerus"; at page 239, line 27, for "acromion" read "olecranon"; at page 314, line 14, for "more" read "mere"; at page 471, line 13, for "glands" read "glans."

The description of the various types of disease is good; and the book will be extremely useful to all who are interested in the study of children's diseases, especially to the busy practitioner who has not time for the investigation of original authorities. The first chapter deals with the qualifications of those who have to attend sick children, and it contains many valuable

suggestions, including a description of transfusion and the method of performing the operation. The third chapter deals clearly and succinctly with the various forms of septic disease. We are pleased that the author strongly advocates the early removal of enlarged glands when a fair trial of constitutional measures has failed to give relief. We have had occasion to adopt this method of treatment a great many times; in some cases from twenty to thirty glands have been enucleated, and the wounds have generally healed by first intention, the very best results on the general health of the child being immediately apparent. The various diseases of the bones and joints are effectively dealt with, and, prefixed to the chapter on joint-disease, there are excellent diagrams, showing the relation of the synovial membranes to the epiphyses in the larger joints. The study of these relations is of great importance in considering the starting-point of disease. Arthrectomy, excision, and other operations upon the joints are fully described. Much care has been taken by the author to define the various kinds of fracture, especially those involving the joints and epiphyses. Practitioners are cautioned as to the risks of anchylosis attending such injuries, especially in the neighbourhood of the elbow. Chapter IX. contains a useful article upon "arthrodesis," the somewhat novel operation for anchylosing flail-joints, which much commends itself to our judgment. In considering the causes of genu-valgum, Mr. Power should have laid more stress upon overgrowth of the inner tuberosity of the tibia; for we have seen several cases in which the condition was due entirely to this cause.

There is an exhaustive chapter upon diseases of the ear, and the secondary troubles to which they give rise; and the surgery of the brain is well illustrated by diagrams to indicate the precise spots at which the skull should be trephined. Chapter XVII. treats of diseases of the air-passages; and includes a good article upon diphtheria, which is up to date and describes the treatment of the disease by antitoxin, by intubation, and by tracheotomy. Antitoxin, we are told, is still on its trial as a remedial measure. Hernia in its various forms is well described, and much stress is laid upon the operation for radical cure. Phymosis is so common amongst children, that the long article upon it and upon the operation of circumcision is well worth reading. We cannot, however, agree with the condemnation of dilatation of the prepuce as a treatment for phymosis, for we have frequently succeeded in curing very severe constrictions by this means. The mistake lies in dilating too rapidly, and in not drawing the prepuce back twice a day. The plan of "enucleation" is not alluded to in the treatment of subcutaneous nævi; it is very serviceable.

We think that, notwithstanding the author's apology, orthopædic surgery should receive some notice in a work upon the surgical diseases of children; and that at least a short

chapter on the early treatment of talipes would be of the greatest use to general practitioners. Nearly all such cases of deformity first come under their notice, and it is not very rare to meet with cases in which the doctor has told the parents of the child that it will grow out of the clubfoot. A chapter upon the diseases of the eye, which are common in infancy and childhood, would also render the work still more complete. With these suggestions we take leave of a work the perusal of which has proved interesting and profitable. We cordially recommend it to the consideration of our professional brethren.

A Handbook of Hygiene. By A. M. DAVIES. Pp. xii., 590. London: CHARLES GRIFFIN AND COMPANY, LIMITED. 1895.

Dr. Davies, the late Assistant Professor of Hygiene in the Army Medical School at Netley, makes no claim for originality in this volume. He has aimed at collecting together in small compass, with the selective aid of his own experience, all the most valuable information contained in the larger, and to many students inaccessible, text-books. The selection is on the whole well done, and the book contains a very large amount of useful information.

As a handy and trustworthy reference book for medical officers serving abroad, it will be useful; but omissions, necessitated by the scheme of the work, stand in the way of its serving as a complete text-book for the study of public health.

Obstetric Surgery. By EGBERT H. GRANDIN, M.D., and GEORGE W. JARMAN, M.D. Pp. ix., 207. Philadelphia: THE F. A. DAVIS COMPANY. London: F. J. REBMAN. 1895.

This work, by the Obstetric Surgeons to the New York Maternity Hospital, has many of the excellencies and not a few of the peculiarities of American medical publications.

The first part of *Obstetric Surgery* to engage our attention is its "Introduction," so-called, but which is in fact a rather long and elaborate description of Obstetric Asepsis and Antisepsis. We think that our American *confrères* exaggerate more than we do, in Europe, the all-importance of thorough-going asepsis. This, however, is a fault on the right side, and much better than the opposite extreme. In *Obstetric Surgery*, for instance, we find painfully minute directions for accomplishing the thorough antisepsis of the patient herself, such as savour very much of the *nimia Medici diligentia*, and to which we should have difficulty in inducing our countrywomen to submit. It is stated: "If the

required manipulations are in the vagina, a new tooth-brush [!] should be inserted into the canal, and this should be also scrubbed with soap and water. It is next to be scrubbed with a solution of bichloride of mercury (1 to 1000)." The probable effect of the rough treatment thus described would be abrasion of epithelium, and then mercurial poisoning. Is it worth while to run this risk, when we are told subsequently: "We have endeavored to emphasize our belief, and this is the current belief, that the lying-in woman is septicized solely through personal contact. By this we mean that the atmosphere is not a factor, and that the infectious material does not originate in the body of the woman"? The following little paragragh, with its *couleur de rose* view of parturient perils, forms both a fitting close and climax to this aseptic "Introduction." "*Aseptic* and *elective* obstetrics rob labor of its terrors and the puerperal state of well-nigh its sole risk." But, how about hemorrhages, accidental, unavoidable, and *post-partum?*

Chapter I. treats of "Obstetric Dystocia and its determination." Before entering upon this chapter, we wish to say a few words as to the manner in which the publishers have done their work. It deserves unqualified approval. The paper and type are excellent and the illustrations unexceptionable; and the book on the whole is beautifully got up. As regards the illustrations, the majority are woodcuts and are borrowed from well-known standard works on Midwifery; for which service the authors duly express their obligations. There are altogether eighty-four woodcuts. We must, however, notice more in detail a prominent feature of the book—the fifteen full-page plates; these are from photographs, and "have been prepared from nature under the personal supervision of the authors." Now, these photographs are very well executed, and we have applied the term "unexceptionable" to them as well as to the woodcuts, but solely as works of art. On the score of good taste, however, they are decidedly *exceptionable.* For instance, in Plate III., a woman has been photographed lying on her back, with bare abdomen, thighs, nates, and external parts fully exposed, whilst a surgeon is digitally examining her, and a young man (probably a pupil) and a young nurse in No. 2 of Plate III. are holding her thighs in good position and in the most unconcerned manner. Now, we all know that medical men (or women) ought not to be squeamish about such proceedings, were it impossible to otherwise procure correct diagrams for teaching purposes—as the preface expresses it, for the "special end in view of teaching graphically." But the picture in question does not do this; it only shows the ordinary position on the back which in America and on the Continent is usually adopted during obstetric operations. To subject a patient to such an ordeal as this in order to achieve so small a result is, we venture to think, morally indefensible. If we could render the integuments and

the viscera and their contents, of a woman during labour, as transparent as those of a rotifer under the microscope, photographs would soon supersede diagrams, but at present we must rest contented with the latter. The same objections on the ground of inutility, though not of course of indelicacy, apply to photographs of obstetric operations on the mannikin such as Plate IV. Here the hands of the operator holding the forceps are most life-like and natural, but no idea whatever is given of the relative position of the forceps, the head, and the pelvis. With the exceptions we have mentioned, Chapter I. is a very good and practical one, and also very complete and exhaustive, good qualities in which the Americans, especially in their larger works, much resemble the Germans. There are a number of descriptions and diagrams of instruments, chiefly for external pelvimetry, the first of which we recognise as the celebrated callipers of Baudelocque. (But why, throughout this book, is the first syllable of the great French accoucheur's name always spelt Beau—instead of Bau?) After all, these external pelvic measurements are not of much practical value, and we quite agree with the authors, that for determining the internal measurements, "the finger and, if need be, the hand" (under anæsthesia) "best subserve the purpose." There are also in this chapter some very good woodcuts of pelvic distortions of various kinds, and descriptions of diseased conditions and other causes which produce them.

In Chapter II. Artificial Abortion and the Induction of Premature Labour are treated, and the morbid conditions which would justify one alternative or the other are discussed with much good sense and judgment, especially in carefully balancing the often conflicting interests of mother and child. This is followed by a useful series of diagrams representing the various instruments suitable for either proceeding. We have had considerable experience of these operations, and on the whole recommend the instruments and the mode of inducing labour adopted by Dr. Barnes.

In Chapter III., which treats of the Forceps and which is one of the best in the book, there are some excellent woodcuts of various instruments of this kind. These are most useful and practical. Elliott's forceps, which seems to be in very general use in America, is, in our opinion, too short in the shanks. Barnes's long forceps, perhaps the best and most used in England, is not here represented. We observe that in certain exceptional cases of breech presentation, the authors recommend the application of the forceps to the breech in order to expedite delivery. In this respect we do not agree with them. If the forceps do not slip off, which is the most likely thing to happen, the extremities are almost sure to make most injurious pressure on large and important viscera, such as the liver, spleen, or heart, and thus most probably occasion the death of the child.

Had time and space permitted, we should gladly have dealt

at some length on Chapter IV., for it is the longest, the ablest, and the best illustrated in the book, besides being perhaps the most interesting. In the next two chapters Symphysiotomy and the Cæsarean Section are considered. The concluding chapters deal with Embryotomy and the Surgery of the Puerperium.

This work, written from the surgical point of view of obstetrics, is one which would be read with great advantage by rising accoucheurs in general, but *par excellence* by those who aspire to the important post of obstetric surgeon to a hospital.

Dissections Illustrated. By C. GORDON BRODIE. In Four Parts. Part IV.: The Abdomen. London: WHITTAKER & Co. 1895.—The present number completes this excellent work, which we have favourably noticed on previous occasions. The plates showing the perineum and those showing the abdominal viscera are fully up to the previous standard, and are further illustrated by diagrams which serve the useful purpose of explaining the coloured plates. The whole work will form a valuable aid to the student in reading up anatomy in the study, and will readily recall the appearances presented by the parts seen in actual dissection.

An Anatomical Dissertation upon the Movement of the Heart and Blood in Animals, being a Statement of the Discovery of the Circulation of the Blood. By WILLIAM HARVEY, M.D., Physician-Extraordinary to King James the First; Physician-in-Ordinary to King Charles the First; and Professor of Anatomy in the Royal College of Physicians in London. Privately reproduced in facsimile from the Original Edition printed at Franckfort-on-the-Maine in the year 1628, with a Translation and Memoir, for G. MORETON, Canterbury. 1894.—This is a most interesting volume, and greatly to be prized by the bibliophile and physician. A facsimile reproduction by collotype of the original work printed for Harvey at Frankfort in 1628, with ample margins, rough edges, and parchment-board binding, the *format* is indeed delightful. An anonymous, but apparently new, translation of the text follows the main body of the work, and preceding it is a sketch of the life of the illustrious man, while the portrait of Harvey in the National Portrait Gallery reproduced in photogravure serves for the frontispiece. It is to be regretted that the College of Physicians refused to allow their probably better portrait of their ever famous Fellow to be reproduced for this work. While hardly perhaps rivalling as a medical classic the translation of Harvey's works by Dr. Willis, published nearly fifty years ago by the Sydenham Society, this is distinctly a most precious possession.

The Lumleian Lectures on certain points in the Ætiology of Disease, delivered before the Royal College of Physicians, 1892, to which

is added the Harveian Oration delivered before the College in 1893, with a Biographical Notice of Harvey, and an Appendix of Statistical Tables. By P. H. PYE-SMITH, M.D., F.R.S. Pp. 236. London: J. & A. CHURCHILL. 1895.—The report of the Lumleian lectures contained in this volume has the portions which on the occasion of their delivery were omitted on account of want of time. The biographical notice of Harvey, which here follows the Harveian Oration, is from the last edition of the *Encyclopædia Britannica*. The whole volume should be read by those who have not already done so, but it is not a book to epitomise or condense.

Diabetes, and its Treatment. By A. VINTRAS, M.D. London: BAILLIÈRE, TINDALL AND COX. 1895.—This little book is made up of twenty-four pages of matter on diabetes and forty-two pages of catalogue of the publishers. The latter we are not called upon to review, and the former is not worth it. The author in the preface alludes to "this pathological study of diabetes," but we find no reference to pathology afterwards; and he states that he has given "due prominence to the practical questions of diagnostic, prognostic, and to special therapeutical indications," whereas it appears to us that he has given little prominence to any of the numerous interesting features of the disease. His diagnostic summary is as follows: "Any person who feels the necessity of drinking large quantities of liquid, who is easily fatigued, who becomes thin without any apparent cause, whose sight becomes so weak as not to allow him to read without powerful glasses, should be suspected of diabetes, and his urine should be examined." Surely it was not necessary to write a book to tell the profession this, and is it credible that the author does not examine the urine in cases not included in the above description? It has always appeared to us that no examination of any patient is complete without an examination of the urine for both albumen and sugar. We can find no *raison d'être* for such a book as this, and cannot congratulate either the author or the publishers on its appearance. Many good books on diabetes are within easy access; a perusal of this one is a mere waste of the small amount of time which it requires.

Considérations sur les Ruptures de l'Utérus et du Vagin pendant l'Accouchement et la Valeur de la Laparotomie dans leur Traitement. Par le Docteur G. I. ANDRONESCO. Pp. 22. Bucarest: IMPRIMERIE DE L' "INDÉPENDANCE ROUMAINE." 1895.—This is a small pamphlet treating of thirty-five cases of rupture of the uterus and vagina. A brief outline is given of each case, with an account of the *post-mortem* examination when one was performed. After delivery of the fœtus by forceps, two cases were subjected to laparotomy and the rents sewn up. Both cases recovered. The success attending these operations was such that the author thinks that laparotomy is the operation of the future

in these cases. Of the thirty-five ruptures recorded only fourteen recovered. Various statistical tables of the cases are given, and the book concludes with an account of the methods adopted at the Bucharest Lying-in Hospital. The work is illustrated by four woodcuts, and is well worth perusal.

The Extra Pharmacopœia. By WILLIAM MARTINDALE and W. WYNN WESTCOTT, M.B. Eighth Edition. Pp. xxviii., 581. London: H. K. LEWIS. 1895.—This little book is of great value to the practitioner. The new edition has the same features which have made the former ones so generally popular, and the information contained in it can be relied on as being thoroughly up to date. One hundred and ten pages of new matter have been added.

A New Method of Inhalation for the Treatment of Diseases of the Lungs. By W. H. SPENCER, M.D. Pp. 54. London: THE SCIENTIFIC PRESS, LIMITED. 1895.—The principles and conditions of this method of treatment, and the vaporiser as a means to its practical application, are here fully described; and "of all the methods devised for the direct application of remedies to diseased parts in the interior of the lungs, that commonly known as inhalation has been the most popular," but it has also been the most barren of results. Dr. Spencer sets himself to enquire where the principle of the method has been at fault, and whether it may not be made to give better results. His vaporiser consists of a stout wire frame attached to a circular and firm wooden stand. Two pans are suspended on the frame over the source of heat. One of these pans contains the liquid to be vaporised, the other contains water; the evaporating pan is therefore immersed in a water bath, and has an oil lamp underneath. It will work for twenty-four hours without needing renewal of the water, the volatile oils being supplied from time to time as required. By the use of this apparatus the patient is placed in a medicated atmosphere, and is kept in it, always, if needs be, or by night only, as may be convenient. Various more or less potent antiseptic oils are supplied for use in different diseases, and we have found them to be of much service in cases of whooping cough and of phthisis.

A Book of Detachable Diet Lists. Compiled by JEROME B. THOMAS, M.D. Philadelphia: W. B. SAUNDERS. 1895.—The busy practitioner has little time to write out systems of diet for the individual patient, but this set of ten lists will include all the essential varieties of diet table. These lists are decidedly American, and will need a few erasures for use in this country.

The Treatment and Education of Mentally Feeble Children. By FLETCHER BEACH, M.B. Pp. 32. London: J. & A. CHURCHILL. 1895.—Dr. Beach tells us he has laboured twenty years among feeble-minded children, so that when to "summarise his observations" he produces a book which with the title-page and

preface consists of only 32 pages, of well-leaded pica type, we are reminded of the parturient mountain and the birth of the mouse. In so small a pamphlet—for it really is nothing more—no one could expect to find more than the barest outlines of the treatment and education of mentally-feeble children.

Clinical Lectures on the Prevention of Consumption. By WILLIAM MURRELL, M.D. Pp. viii., 103. London: BAILLIÈRE, TINDALL AND COX. 1895.—In these lectures, originally delivered at the Westminster Hospital and published in the *Medical Press*, Dr. Murrell has brought together a concise and suggestive collection of facts dealing with the preventive aspect of tubercular disease. We trust that, in this more permanent form, his lectures will have a wider career of usefulness.

Medical Handbook of Life Assurance. By JAMES EDWARD POLLOCK, M.D., and JAMES CHISHOLM. Fourth Edition. Pp. 214. London: CASSELL AND COMPANY, LIMITED. 1895.—This work has been thoroughly revised and brought down to date. Some such manual is necessary for the guidance of medical examiners, in order that there may be something like uniformity in the rating of second-class lives. There is no difficulty in reporting on the entirely eligible, nor is there in excluding the entirely ineligible, but the intermediate cases are often difficult to deal with. We have learnt to be exceedingly suspicious of those candidates for insurance who have forgotten all details relating to the cause of death of the various members of the family, and the certificates of death obtained from Somerset House or the local registrars will often protect the office against the acceptance of an altogether unjustifiable risk.

The Johns Hopkins Hospital Reports. Vol. IV., No. 6. *Report in Surgery*, II. Baltimore: THE JOHNS HOPKINS PRESS. 1894. —This report contains the results of operations for the cure of cancer of the breast, performed at the Johns Hopkins Hospital from June, 1889, to January, 1894, by Dr. William S. Halsted. The operation advocated and practised by Dr. Halsted is a most radical one, involving removal not only of the whole mammary gland with its overlying skin, but also the whole contents of the axilla, as well as the greater part of the pectoralis major and minor muscles with their fascial sheaths. Great importance is attributed to the removal of all this tissue in one piece, so as not to divide lymphatic vessels containing cancer cells; and with this view, nothing but clean incisions are permitted, all tearing and scraping being strictly prohibited. Fifty cases are recorded, with only three local recurrences, comparing very favourably with the results obtained by other operators who have adopted a less radical operation. This volume furnishes additional evidence of the good work being done at the Johns Hopkins Hospital, and should be studied with care by all operating surgeons.

Saint Bartholomew's Hospital Reports. Vol. XXX. London: SMITH, ELDER, & Co. 1894.—St. Bartholomew's Hospital Reports are always interesting. This volume opens with an account by Dr. Gee of a very rare form of disease—an aneurysm of the ascending part of the arch of the aorta taking the natural position of the heart. In the previous volume Mr. Butlin related how he had tried to do with only a modification of strict antiseptic measures in surgery, and how his results had consequently fallen short of what might be expected from aseptic methods; in the present volume he tells us how good his results have been with strict asepsis. In some cases his wounds suppurated, but as house-surgeons and dressers became gradually initiated into the details of the method the frequency of suppuration decreased. Mr. Thomas Smith reports a case in which the superficial femoral, the deep femoral, and the popliteal arteries with their corresponding veins were ligatured in the course of the removal of a large sarcomatous tumour of the thigh, without damage to the vitality of the limb; but the veins had become occluded and the lumen of the artery very much diminished by pressure before the operation, so that no doubt the collateral circulation had become partly established. The great omentum is the subject of a paper by Mr. McAdam Eccles, and from a perusal of the paper one finds there is much of interest to be said about its anatomy, physiology, and pathology; and perhaps the most interesting question discussed is, as to the cause of the symptoms when, in cases of strangulated hernia, only the omentum is found nipped in the sac. We cannot say any clear light is thrown on this point, but the various views on the question are ably discussed. We can only refer to a few among the many contributions, not because we consider them the most valuable, but because space only allows us to mention those in which we have felt the most interest.

Transactions of the Epidemiological Society of London. New Series. Vol. XIII. London: SHAW AND SONS. 1894.—This volume, in no way inferior to preceding volumes of the Series either in variety or in the individual interest of the contributions, contains nine papers, ranging from "The History of Epidemiology in England," by Dr. J. F. Payne, to "Cholera in Persia," by Dr. Camposampiero. All are of the most interesting nature and will repay careful perusal. Not the least interesting are Dr. Payne's address and Dr. Clemow's contribution on "Cholera in Russia." As a supplement, we have for the first time in print a contemporary treatise on the Great Plague in 1666, written by William Boghurst, an apothecary in St. Giles'-in-the Fields, then thirty-four years of age. The manuscript of this interesting work, which has been for a long time in the British Museum, consists of eighty-five leaves, small quarto. It is most curious reading from start to finish, and shows how the medical mind of those days was hopelessly groping about in the dark for the truth. For instance, we are given twenty-one

"diagnosticks," one hundred "evil signes or presagers of the plague," all of the most remarkable nature. It seems, in fact, as if any symptom complained of by a patient was put down as a sign or "diagnostick," and that our author was an acute observer. Of amulets, &c., he has nothing to say "more then what the prophet Jonas saith, 'They that believe lying vanities forsake their own mercies'"; but he gives a long list of things to be avoided, of which we may mention all sins, "Lust, Pride, & whoredom, wantonness, and prophaneness," as typical examples of the firm belief in the plague being the visitation of the Almighty. Boghurst does not believe in bleeding, but recommends issues for fat people "if they run well." His pharmacopœia was most extensive and peculiar, and contains many drugs whose value is not now appreciated. Dr. Payne, who has written an introduction to the treatise, says that it contains the best medical account of the great epidemic which has been preserved.

Transactions of the Royal Academy of Medicine in Ireland. Vol. XII. Dublin: FANNIN AND COMPANY. 1894.—This volume contains no less than forty-five original papers on a great variety of topics: many of them are well-illustrated reports of original work, and others give us the latest views on theoretical questions in pathology. The weekly journals have given us summaries from time to time, but the collected series of papers forms an interesting volume, which will amply repay the expenditure of the time needful for a careful review. On page 65 we find an instructive summary of the contrast between exophthalmic goitre and myxœdema, and a comment on the beneficial effects of partial thyroidectomy.

Annual Report of the Department of Health of the City of Chicago for 1894. 1895.—The city of Chicago contains somewhat over a million and a half (census, 1,567,727) persons, composed of many nationalities, and with a large unsettled or floating population. This city was, in the spring of 1893, invaded by small-pox—an experience not unfamiliar in Chicago, and fraught with recollections of previous disaster. Thus, in the 1863–65 epidemic the disease so persisted and continued to spread that the deaths in February and March, 1865, in the third year of its prevalence, exceeded those in the earlier period of the epidemic; in the 1871–75 epidemic, extension of the disease continued over forty-seven months, and in the 1880-83 epidemic the disease persisted for thirty-nine months. In contradistinction to these, the epidemic of 1893–94, although for ten months it progressed and had already assumed formidable proportions, leading to 157 deaths in May, 1894, had its progress checked by very special action during that month; so that in June there was a reduction of more than one-third of the number of cases, and in July the epidemic as such "was substantially under control, and thenceforth steadily declined, until the disease lost all significance as a

public health factor." At this time Chicago was fully ripe for an epidemic of small-pox equal to or exceeding that of any previous epidemic. Vaccination had been gravely neglected for many years. Fifty-nine per cent. of all cases received and treated were found to be unvaccinated, revealing a worse condition as to vaccination than in the epidemic of 1881-83, the most serious, most prolonged, and most fatal of all its epidemics. As might be expected in cosmopolitan Chicago, several districts are so distinctly foreign as to necessitate the employment of interpreters to work in them, and in these districts particularly the disease flourished and spread. The people resisted every effort of the Department to stamp out the disease; they refused to be vaccinated; they formed mobs to resist the isolation of cases. They secreted cases whenever and wherever they could; sometimes the house was barricaded against the inspectors. On one occasion an irate father, revolver in hand, stood by the bedside of his child and dared any official of the municipality to come within five feet of his offspring; one husband, when he learned that his wife and children's unvaccinated condition was the cause of his trouble, wished to kill the wife at once. In such case and under such conditions—conditions presenting no ordinary difficulties—it became obvious that prompt and radical measures alone could be of any avail, and the authorities, having determined upon the suppression of the outbreak, set about it in a wholehearted and complete manner which does them infinite credit. To quote Dr. Reynolds, the Commissioner of Health: "This suppression was effected by an achievement of preventive medicine, . . . unparalleled as yet in sanitary administration, to-wit, the wholesale vaccination of a population of sixteen hundred thousand people, among whom more than a million free vaccinations were performed—one-third within thirty days after authority was finally secured from the City Council for the employment of men and the purchase of material,—586,500 [or more than half a million vaccinations, covering a population of more than twice the size of Bristol] in a single month. By the close of June smallpox was at an end as an epidemic disease . . . 'a disease of unusual and increasing prevalence at the time.'" In spite of the many and serious difficulties inherent in such a situation, so great was the tact, forbearance, and courage shown by the five hundred special vaccinating officers, who had to face not only abuse, but also personal violence, that, without resort to force, and without precipitating riot or bloodshed, such as occurred elsewhere, in all but four cases vaccination or removal was peaceably carried out. The planning of such a campaign was an effort of genius, its successful execution a masterpiece of executive ability unequalled in preventive medicine, and to remain unequalled, we fear, in the Old World, with its growing tenderness for private fads, its hesitancy to oppose vulgar prejudice, and its half-heartedness in municipal control in matters not understanded of the people. Chicago may well be

congratulated, not only on the New World pluck which suggested this beneficent policy in the face of extreme odds, but also on the New World enterprise which brought it to a successful issue, and on the signal and gratifying success in the conservation of life which has resulted. The following table, giving the particulars relating to the 2,332 cases in hospital, shows well the severity of the type of disease; the case mortality amongst all classes being as high as 27.7, while that amongst the unvaccinated at all ages was as high as 36.2 per cent:

Age.	Whole Number Treated.	Number Vaccinated.	Number of Vaccinated that Died.	Mortality per cent.	Number not Vaccinated.	Number of not Vaccinated that Died.	Mortality per cent.	Mortality per cent. both classes.
From 1—6 ...	648	64	8	12.5	584	257	44	40.89
From 7—15 ...	259	80	3	3.75	179	41	22.9	16.98
From 15—25 ...	469	251	45	17.92	218	74	33.94	25.37
From 25—35 ...	542	313	54	17.28	229	74	23.64	23.8
Over 35 ...	414	285	51	17.89	129	39	30.23	21.73
Totals and percentages ...	2332	993	161	16.21	1339	485	36.22	27.7

In the recent epidemic in Bristol, the case of mortality amongst all classes did not exceed 10 per cent.

Vocabulary of Diseases. Prepared by J. G. KERR. Pp. 35. Shanghai: AMERICAN PRESBYTERIAN MISSION PRESS. 1894.—This is a dictionary of Chinese medical terms, based on Thomson's vocabulary and Whitney's anatomical terms. It has been prepared for the Committee on Nomenclature of the Medical Missionary Association of China, and must be very useful to those whom it may concern.

Year-book of the Scientific and Learned Societies of Great Britain and Ireland. London: CHARLES GRIFFIN AND COMPANY, LIMITED. 1895.—This, the twelfth annual issue, is a more complete chronicle than its predecessors, but we notice several inaccuracies in the reports of local societies. It looks as if the various Secretaries had not had a chance of revising their proofs.

Burdett's Hospital and Charities Annual. 1895. By HENRY C. BURDETT. London: THE SCIENTIFIC PRESS (LIMITED).—*Burdett's Hospital Annual* has become a necessity for all who are interested in the question of hospital management or who require statistics in any subject connected with medical charities. When Mr. Burdett confines h s attention to the collection of facts and statistics, no work could be done more satisfactorily, but when, in reference to hospital administration and the medical profession, he enlarges on the reforms which he considers necessary and even urgent, he is treading on more debatable ground,

and he must not be surprised if we say that his opinions materially detract from the value of the book. We notice that the errors in the last two numbers which we pointed out have been rectified.

Hermes Medical Supplement. Vol. I., No. 1. Aug. 20th, 1895. Sydney: GEO. ROBERTSON AND COMPANY.—This small contribution to medical literature, the Journal of the Sydney University Medical Society, is to be published once in each term. We wish the infant a vigorous and continued growth, such as may be expected from the combination of the talents of graduates and undergraduates of the Sydney University.

We are glad to notice that with the new year Mr. W. Saunders, of Philadelphia, is to issue an *American Year-Book of Medicine and Surgery.* It is to be edited by Dr. George M. Gould, the editor of the *Medical News.* This is a guarantee that its summaries will be crisp and informing.

Dr. Unna's *Histopathology of the Diseases of the Skin*, translated by Dr. Norman Walker, is announced by Mr. William F. Clay, of Edinburgh, as nearly ready. This English edition is being revised and added to by the author, and will have several illustrations which have been specially drawn for it.

Notes on Preparations for the Sick.

Chlor-anodyne.—PARKE, DAVIS & Co., London.—In consequence of the great variation in the composition of the various preparations which may be dispensed for Chlorodyne, an attempt to provide an efficient and elegant substitute of uniform composition has led to the adoption of the above name for Messrs. Parke, Davis & Co.'s compound. Each fluid ounce contains:

Morphine Muriate	... 2⅞ grains.	Tinct. Capsicum	1½ minims.
Tinct. Can. Ind. ...	... 46 minims.	Hydrocyanic Acid (dilute)	9 ,,
Chloroform	... 46 ,,	Glycerine	75 ,,
Oil Peppermint ...	... 1½ ,,	Alcohol	q.s. ad 1 fl. oz.

The adult dose is 15 minims.

It will be observed that the fluid is of simpler composition than that of the so-called Chlorodyne, and that glycerine is used as the solvent. There is no sediment. It should be a uniform and trustworthy preparation.

Tincture Strophanthus. Tabloids: Magnesium Sulphite; Opium Tinct.; Pure Tar and Codeine; Improved Gregory Powder. Suppositories: Glycerine; Hazeline; Zyminised (Peptonised).—BURROUGHS, WELLCOME & Co., London.—The names of most of these preparations sufficiently indicate their composition and uses. **Sulphite of Magnesium** as a local bactericide in the treatment of follicular tonsillitis, aphthæ, and sarcinæ, should be of

utility, as it is easily decomposed on contact with the mucous membrane into sulphurous acid and oxide of magnesium. The tabloids are flavoured with peppermint, and sweetened, so that no objection need be raised to them even by children. The **Gregory Powder Tabloids** contain a proportion of sodium in place of magnesium carbonate. They appear to be an improvement on the old Gregory powder (pulv. rhei co.), and have the advantage of the tabloid form in being less nauseous than the powder which has nauseated so many generations of sick children.

Liq. Cinchonæ Hydrobrom.; Syr. Cinchon. Hydrobrom.; Syr. Cinchonæ et Ferri Hydrobrom.; Vibrona (Cinchona Wine).—FLETCHER, FLETCHER & Co., London.—Fletcher's **Syrups** are too well known to need description, and their names are a sufficient index to their therapeutic properties. The combination of cinchona and iron is an excellent preparation. **Cinchona Wine** has not been so much appreciated in this country as on the Continent. This preparation from the red cinchona bark is not unlikely to become quite a fashionable medicine.

Lactopeptine Tablets.—JOHN M. RICHARDS, London.—Each tablet contains five grains of the powder which has withstood the competition of twenty years. We rather prefer the powder form, as the tablet does not mix so readily with the food and will take a much longer time to dissolve. The powder mixes so readily with water, and is so free from unpleasantness of taste, that many patients will prefer it to the tablet in spite of the greater convenience of the latter for the regulation of the dose.

Vimbos.—SCOTTISH FLUID BEEF CO. LIMITED, Edinburgh.—This is a semi-fluid paste, containing nitrogenous organic matter amounting to nearly 51 per cent., with salines (including phosphates) amounting to 24 per cent., and traces of fatty matter with only 25 per cent. of water. When suspended in water and boiled it gives a considerable precipitate of albumen. Its odour and taste are similar to those of other beef extracts, but its composition shows it to contain nutritious matter which must give it an active force-producing value over and above the stimulating properties of beef extracts in general. It is put up in bottles and earthenware jars, and is a convenient and efficient storage of nutriment for those who require easily assimilated and nutritious food.

Dr. Tibbles' Vi-Cocoa.—THE VI-COCOA COMPANY, London.—This cocoa is prepared from hops, malt, kola, and cocoa. It is more than a beverage, and must be ranked as a food of a restorative and stimulating kind. It is rather more bitter to the taste than other preparations of cocoa, but it must be distinctly more stimulating and sustaining, especially for those who have to do much exhausting brain-work.

Izal.—NEWTON, CHAMBERS & Co. LIMITED, Sheffield.—Izal is a non-poisonous disinfectant which is highly spoken of by Dr. Klein, and for surgical purposes it is praised by Mr. Bruce Clarke. It is a powerful and absolutely non-irritating germicide, which may be used internally if required. It is now coming largely into use.

Absorbent Lint; Absorbent Wool; Rubber Plaster (Calico and Holland); Holland Strapping; Belladonna Plaster; Open Wove Bandages (White and Grey).—LESLIES LIMITED, London.—Specimens of all the above have been sent us, and we can recommend them as the very best of their kind. They are too well known by all surgeons to need any description.

Barff Boro-Glyceride.—THE KREOCHYLE Co., London.—This antiseptic food-preserver is now well known. It has also many surgical uses. The specimen sent to us is in a handy form of tube containing one ounce.

Sedative Snuff; Antiseptic Handkerchiefs; Massage Unguent; Iodo-Glycerol Liniment; Ung. Hamamelidis Co.; Aseptic Hypodermic Solution of Morph. Hydroch.—ARTHUR & Co., London.—The **Snuff** is the well known combination of bismuth and morphia (gr. ij. in ℥j.); it is a dry smooth powder with a pleasant aroma, which cannot fail to give satisfactory results when used with a ball insufflator in cases of nasal catarrh. The **Antiseptic Handkerchiefs** are made of tough absorbent Japanese paper, rendered aseptic and perfumed with eucalyptus, pinol, and lavender. They are decidedly an improvement on the ordinary handkerchiefs, which when dried or in the process of washing are likely to give rise to the dissemination of bacilli. Nothing is more needful in the management of cases of phthisis than the destruction of the discharged virus, and the use of cheap destructible handkerchiefs like these, which cost less than washing, enables the patient to accomplish the end in view. It is obvious that they will not disinfect the discharges, and must themselves be destroyed before the accumulated secretion can be converted into dust. The portion of the handkerchief used should be at once burnt, and not allowed previously to become dry. The **Massage Unguent** is a softened and deodorised oil of theobroma, the two faults in the ordinary oil having been removed. The **Iodo-Glycerol Liniment** is a non-irritating solution of iodine which is much more likely than the ordinary tinctures to be absorbed through the skin. The **Ung. Hamamelidis Co.** has a lanoline basis, with antiseptics and anodynes: it is put up in collapsible tubes, and should be very useful in the treatment of hemorrhoids. The **Aseptic Solution of Morphia** contains gr. $\frac{1}{20}$ in each minim: it is intended for hypodermic injection.

The "Limpet" Air-tight Cover.—Day & Co., Weston-super-Mare.—This is a very ingenious little device by means of which, with the most simple application, a cup or glass can be provided with a thoroughly efficient cover. It consists of a disc of rubber, tightly stretched in a circle of metal, and is applied by slight pressure with the fingers in the centre. It needs only to be known to come into general use. The cover is made in four sizes, which vary from $3\frac{3}{8}$ to 7 inches in diameter. One or more of them should be in every house.

Bristol Medico-Chirurgical Society.

Annual Meeting, October 9th, 1895.

Dr. A. J. Harrison, President, in the Chair.

After a vote of thanks to the retiring President (Dr. A. J. Harrison) had been unanimously passed, Mr. Arthur W. Prichard (the President-elect) took the Chair, and read his inaugural address (see page 241), for which a cordial vote of thanks was given him. The Honorary Secretary (Mr. J. Paul Bush) and the Assistant-Editor and Honorary Librarian (Mr. L. M. Griffiths) read their annual reports, which were adopted. The following officers were chosen for the ensuing year:—President-elect; Dr. A. E. Aust Lawrence: Honorary Secretary; Mr. J. Paul Bush: Honorary Librarian; Mr. L. M. Griffiths: Members of Committee; Dr. J. Michell Clarke, Mr. J. Dacre, Mr. W. H. Harsant, Dr. Bertram M. H. Rogers, Dr. J. E. Shaw, and Mr. G. Munro Smith: Representatives of the Society on the Committee of the Bristol Medical Library; Mr. L. M. Griffiths, Dr. G. Parker, and Dr. J. Swain.

November 13th, 1895.

Mr. Arthur W. Prichard, President, in the Chair.

Mr. C. A. Morton showed: (1) A man, aged 35, with cyst of the antrum, which had not caused general expansion of the bone, but presented as a soft swelling between the cheek and the superior maxilla. The contents had been withdrawn (a viscid yellow fluid, full of cholesterine crystals), and the opening in the outer wall of the antrum through which it had projected could be plainly felt; (2) A woman, aged 60, with a slowly-growing form of sarcoma of the superior maxilla, under treatment by injections of erysipelas toxins for four months. There had been a unilateral discharge of a minute quantity of pus from the nostril of the affected side many months before she came under observation, and the antrum had been explored to exclude empyema. A mass of new tissue an inch in thickness was then found, and the bony wall of the antrum had been absorbed so that it cut easily with the scalpel. The growth extended too far back to allow of removal. The result of treatment had been a diminution in the growth in the canine fossa, but it had spread over the nasal process. The pain had been much diminished. Mr. Morton described the origin and method employed in the erysipelas toxin treatment of malignant growths and gave Coley's results, and also referred to one other case in which he had employed the method.

—Mr. CHARLES A. HAYMAN thought that, as the fangs of the second (or thirteen year) upper molar teeth pierce the floor of the antrum in so many cases, the cyst under discussion may have been relieved permanently by extraction of the carious stumps now to be seen in the patient's mouth.—Dr. G. PARKER said that he had used this toxin in three cases, and had learned a little about its mode of action. There are three methods of employing injections for malignant growths at present under discussion. Emmerich and Scholl use the filtered serum of animals which have been repeatedly injected with cultures of erysipelas; but their results are bitterly disputed in Germany, and Coley, who has recently tried the plan, has given it up. The same uncertainty exists as to the French method. Here injections are made of serum from animals repeatedly inoculated with the juice of malignant growths, and some success is claimed. Coley has gradually elaborated his own procedure: commencing in 1891 with living cultures of erysipelas as injections, then using the filtered products of the streptococcus mixed with a little of those of bacillus prodigiosus; while of late he utilises the bodies of the microbes also, and only sterilises the liquid at the moderate temperature of 58° C., which is not so high as to break up some of the delicate toxins contained in it. Moreover, he finds the greatest difficulty in growing a trustworthy toxin. His present ones are derived from a fatal case of erysipelas, and intensified by passing through rabbits. He has now treated eighty-four cases, but only forty-three of these were sarcoma, for which alone he recommends the treatment. Of these forty-three—many of them recurrent or tested microscopically—he claims that eleven are cured, besides three successes in carcinoma and two or three in epithelioma. Some half-a-dozen other cases are reported by his friends where the tumours have broken down and disappeared. Senn reports that he found it a complete failure when tried on nine cases; but it appears that only three were simple sarcomata, and besides he used toxins from various sources of doubtful quality. Coley is careful to inject the fluid near or into the growth; but when this is highly vascular, Dr. Parker finds that the greatest care is needed, otherwise even minute doses give a most dangerous reaction. In one of his cases, a patient of Mr. Barclay's, they had to do with a recurrent sarcoma, and here the remedy failed altogether, though a reaction of 101° and 103°, with rigors, headache, and vomiting, followed regularly. The second case was an internal tumour of doubtful character, and was remarkable for the absence of reaction, though as much as twenty minims were injected at once. In the third case—a recurrent carcinoma of the breast, widely disseminated—the toxins appeared to hold the growth in check for a time, and relieved the breathing; but the state of the patient was too feeble to permit the continuance of the treatment and the severe reactions. Dr. Parker realised that only one of his cases was a favourable one for trying the remedy; and in reviewing the large amount of evidence brought forward by Dr. Coley, the repeated microscopical examinations made, and the permanent recoveries met with in so many instances, he thinks that further trials may well be made in cases where operations are undesirable, however hopeless we may feel about such remedies in general.—Mr. W. R. ACKLAND thought in his experience that the anterior swelling of the face—which Mr. Morton thought was unusual—indicated that the cyst of antrum was only secondary to cyst of tooth. He would like further to say, as to treatment, that most of these cases fill up again. Packing with sea-tangle or carbolised gauze was usually necessary.—Mr. GREIG SMITH said that the treatment of tumours by toxins rested on a *vera causa*—the undoubted fact that tumours occa-

sionally disappeared after an attack of erysipelas. He was of opinion, however, that the treatment had not yet shown itself worthy of support. The results at the best were poor: some of them rested on doubtful diagnosis, and a few on more than doubtful diagnosis. Now, every such case should be based on a unanimous diagnosis by a number of surgeons. It seemed a pity to waste a single case of experiment in this treatment: there was a superabundance of undoubted material, and he urged that only cases of undoubted diagnosis should so be treated. He personally doubted if Mr. Morton's case was sarcoma at all—as did others. He would wait for more definite and more favourable results before employing it in his own practice.—Dr. MARKHAM SKERRITT inquired in what way the erysipelas toxin was supposed to influence new growths—whether by a direct specific effect upon their nutrition, or indirectly as a result of the fever set up. Such an apparent influence was not limited to tumours. Cases were on record in which the course of pulmonary phthisis had been arrested after an attack of erysipelas. Nor was it exercised by erysipelas alone. It was possible that the type of an existing disease might be altered after any intercurrent acute febrile attack. He instanced a case of phthisis which had recently come under his own observation, in which the symptoms and physical signs all underwent most striking improvement after an attack of influenza with high temperature, the tubercular process seeming to lose all its activity. Such evidence went to support the view that any influence of erysipelas upon tumours was due to the accompanying pyrexia rather than to the specific power of its toxins. It would probably follow that there would be no certainty of result where a tumour was attacked by erysipelas or treated with the toxin of this disease; and perhaps the short-lived fever accompanying the artificially-produced reactions would be less likely to exert an influence than the prolonged and high pyrexia of a severe attack of ordinary erysipelas.—Mr. MUNRO SMITH remarked on the great difficulty of making a certain diagnosis in cases of this nature, and narrated a case which had been operated on eighteen months ago by Dr. James Swain for tumour of the neck which showed all the microscopic appearances of small round-celled sarcoma. This recurred, and Mr. Munro Smith attempted to remove it; but the operation had to be abandoned, owing to the depth and adhesions of the tumour, which spread down to the front of the vertebræ. Slight suppuration with temperature of 101° followed; and since the operation, four months ago, the large tumour has entirely disappeared.—Mr. W. M. BARCLAY recalled the case of a man in the Bristol General Hospital in which a large tumour in the buttock was diagnosed as a sarcoma, and an operation accordingly undertaken. The growth extended too far for extirpation, and the attempt was given up. The growth, microscopically, was a round-celled sarcoma. It nevertheless entirely disappeared, the wound healing by first intention. (These remarks were made in reference to the uncertainty of diagnosis in malignant cases, even when this seems complete in every point.)—Dr. WATSON WILLIAMS drew attention to the value of trans-illumination by means of an electric light in the mouth, as an aid to diagnosis in certain diseases of the antrum. Referring to the case treated by erysipelas toxin, he mentioned a case of inoperable epithelioma of the throat which he had attempted to treat by inoculating erysipelas streptococci two years ago. He suggested that possibly one might get better results by frequent and repeated small injections, instead of the larger injections which aimed at the production of a definite febrile reaction. In 1891 he had advocated this method of giving tuberculin in tubercular disease; and a limited

experience tended to show that by *avoiding* the "reaction" one might get better results than by the more usual method.—Dr. A. J. HARRISON, before accepting the beneficent effects of erysipelas—be it streptococcus or its toxin—would like to point out that many cases of lupus have been cured or greatly improved by an attack of erysipelas, and that probably the benefit arises from the febrile condition that is induced.—The PRESIDENT referred to a case under the care of Dr. James Swain, who was unable to be present at the meeting. A man, aged 48, suffered from inoperable recurrent sarcoma (diagnosis confirmed by microscope) of the right upper jaw. He was injected almost daily for nearly five weeks with the sterilised products of the streptococcus erysipelatis and the bacillus prodigiosus, after Coley's method. Injections under the healthy skin caused some headache and a feeling of *malaise*, but into the sarcomatous tissue were generally followed by a distinct reaction, with an elevation of temperature (100° to 103° F.), and followed in a day or two by necrobiosis of the tumour in the immediate neighbourhood of the injection. Rigors were fairly frequent, and much depression ensued. In spite of the "breaking down" which occurred, the growth gradually increased, and the patient determined to give up the treatment. He died in September last—about three months after the injections were discontinued.[1] The case was no doubt one of the least favourable for this method of treatment; but though unsuccessful, it seemed to give some promise for the future. Certainly in such deplorably hopeless cases as those of inoperable malignant disease, we should give a fair trial to this new form of therapeusis; but in order not to arrive at false conclusions, it is necessary that the diagnosis should in all cases be supported by microscopical examination.—In reply, Mr. MORTON considered that the origin of such a cyst in disease of the root of the second molar was quite unlikely. These cysts were true cysts, not dropsy of the antrum as used to be taught. A diseased second molar root penetrating the antral wall would be much more likely to cause empyema. The cyst, he thought, probably arose in the antral wall and had no connection with the teeth: such cysts might be seen hanging like clusters of grapes from the wall in some specimens. Mr. Morton agreed with Dr. Parker in the uncertain and varying results of the erysipelas serum as compared with Coley's toxins; and stated that in the preparation he had used, the streptococci had been killed by heating to 58° C., and the toxic products were mixed with those of bacillus prodigiosus. He could not accept the view that the disappearance of malignant growths during an attack of erysipelas was a mere coincidence, and quoted the statistics of such cases in support of the belief; nor could he admit that the swelling was inflammatory rather than new growth, as the amount of new tissue was so great, and the bony wall of the antrum had been absorbed by it. Moreover, there was nothing to account for any inflammatory condition. The view put forward by Dr. Skerritt that possibly the high temperature of erysipelas was the active agent in the destruction of the growth, he could not accept, or why did not growth disappear during other conditions of continued high fever? In reply to Dr. Williams, he said he should not care to employ the toxin in malignant growth of the larynx, injected into the submucous or cellular tissue in the neighbourhood, without being prepared for tracheotomy, as the œdema produced was often very great.

Dr. MICHELL CLARKE showed a man, aged 54, who had suffered from Huntington's chorea for five years. The onset was gradual.

1 Further details of this case have since been published. See *Brit. M. J.*, Dec. 7.

His father was choreic and insane, and his brother is choreic and in an asylum. Other near relatives were choreic and insane. The spasms affected nearly all the muscles of the body, but ceased during sleep. The organic functions were not interfered with. Dr. Clarke mentioned another case of the same affection formerly under his care. The patient was about 50, and the spasms were sudden and shocklike. Others of the patient's relations were affected. Some account was given of the recent researches into the morbid anatomy of the disease.

Dr. F. H. EDGEWORTH showed a series of lantern slides, prepared by Mr. James Taylor, illustrating the pathological changes which occur in the thyroid in Graves's disease. To emphasise the characteristics of these changes, photographs of the normal gland and of adenoma of the thyroid were also demonstrated.

J. PAUL BUSH, *Hon. Sec.*

The Library of the Bristol Medico-Chirurgical Society.

At the Annual Meeting held on October 9th, 1895, Mr. L. M. Griffiths, the Honorary Librarian, read the following Report:—

Since the last Annual Meeting 754 volumes have been added to the Society's Library, which now consists, including 542 duplicates, of 4,530 volumes. The number of current periodicals regularly received in the Library is 127.

The donors of books during the twelve months have been: Sir Thomas Dyke Acland, Bart., the British Medical Association, Dr. R. E. Burges, Mr. E. F. H. Burroughs, Dr. J. Michell Clarke, Mr. T. F. Edgeworth, Dr. C. Elliott, Mr. L. M. Griffiths, Dr. A. J. Harrison, the Council of the Obstetrical Society of London, Dr. Arthur B. Prowse, Dr. H. D. Rolleston, the Royal Academy of Medicine in Ireland, the Sanitary Publishing Company, Mr. J. Greig Smith, Dr. R. Shingleton Smith, the Surgeon-General United States Army, the Council of University College, Bristol, the Editors of the Pathological Report of University College, London, the Staff of Westminster Hospital, and Messrs. J. Wright & Co. Three framed pictures have been presented by Mr. T. F. Edgeworth, and two unframed by Mr. C. K. Rudge.

Thanks to the combined arrangement under which we are working, the total number of volumes now at the service of members of this Society is 14,328, and in the Library there are altogether 151 periodicals.

Considerable progress has recently been made with the work of cataloguing the Library; and I feel sure that if members will familiarise themselves with the card catalogue they will soon appreciate its advantages.

Largely owing to the co-operation of the authorities of University College, the Library facilities which members of the Society possess are almost unrivalled, and should only require to be fully known to secure a large increase in the number of our members. The advantages of the Library should make it worth the while of all practitioners in the neighbouring towns and villages to join the Society.

The duplicates, forming in themselves a not unimportant library both as regards size and usefulness, are at the service of members, who may take them out on loan.

The attention of members is specially directed to the list of "Desiderata" sent out with the June number of the *Journal*, and copies of which can still be obtained on application to the Clerk. The Library Committee feel that many members of the Society have on their shelves volumes which they rarely or never use, and which would be exceedingly welcome in the Library for the purpose of making up sets.

The Library has now become of so important a character that the Committee think it ought to have a distinctive book-plate or rather book-plates; for there should be one for each of its sections. The dominant idea of the College book-plate should be one symbolising student life, and should emphasise the work of teaching carried on in the Medical School and the Hospitals; while the Society book-plate should bring into prominence some of the kinds of work in which the practitioner is engaged. There are professional artists who are prepared to submit designs for book-plates; but with so much artistic talent amongst the members of the Society we ought to be independent of them and be able to secure appropriate devices from amongst ourselves. I shall gladly receive sketches that could be afterwards reproduced for the object in view. The book-plates should measure 4½ inches laterally and 3½ inches vertically. The provision of sketches for this purpose will undoubtedly give the comic man an opportunity, and in this he should be encouraged, as it would be interesting to form a collection of all those sent in, as no doubt most of them would display considerable artistic ingenuity. Library matters, like all matters medical, are getting specialised. Not only is there a journal—*The Library*—which considers all questions of library management and detail, but there is a monthly magazine—*The Journal of the "Ex Libris" Society*—which deals exclusively with the subject of book-plates, and which may possibly furnish hints to any who stand in need of them.

The following donations have been received since the publication of the list in September:

November 30th, 1895.

British Medical Association (1)	28 volumes.
C. Elliott, M.D. (2)	1 volume.
L. M. Griffiths (3)	1 ,,
Stephen Paget (4)	1 ,,
Edward Picton Phillips (5)	6 volumes.
Sanitary Publishing Company (6)	1 volume.
J. Greig Smith (7)	1 ,,
R. Shingleton Smith, M.D. (8)	11 volumes.
Council of University College, Bristol (9)	1 volume.
Editors of the Pathological Report of University College, London (10)	1 ,,

Unbound periodicals have been received from the British Medical Association and Dr. R. Shingleton Smith.

EIGHTEENTH LIST OF BOOKS.

The titles of books mentioned in previous lists are not repeated.

The figures in brackets refer to the figures after the names of the donors, and show by whom the volumes were presented. The books to which no such figures are attached have either been bought from the Library Fund or received through the *Journal*.

Barling, G. ... ... *On Appendicitis, and on Perforation of Gastric and Duodenal Ulcer* 1895
Bell, J. ... ... *Notes on Surgery for Nurses* ... ... 4th Ed. 1895
Bourneville et J. Noir *Recherches sur l'Épilepsie et l'Idiotie* 1895
Brodhurst, B. E.... *Congenital Dislocation of the Hip* 1895
" " " ... ...2nd Ed. 1895
Carter, A. H. ... *Elements of Medicine* ... ... 7th Ed. 1895
Cheyne, W. W. ... *Tuberculous Disease of Bones and Joints* 1895
Crichton-Browne, Sir J. *On Dreamy Mental States* 1895
Curling, T. B. ... *Diseases of the Rectum* ... ... (5) 2nd Ed. 1855
Grandin and G. W. Jarman, E. H. *Pregnancy, Labor, and the Puerperal State* 1895
Hart, Mrs. E. ... *Diet in Sickness and in Health* 1895
Hutchinson, J. ... *Smaller Atlas of Clinical Illustrations* 1895
Jarman, E. H. Grandin and G. W. *Pregnancy, Labor, and the Puerperal State* 1895
Lindsay, R. ... ... *Malaria* 1895
Macnamara, N. C. *Regulations as to Defects which disqualify for Admission into Government Services* 1895
Marsh, H. ... ... *Diseases of the Joints and Spine* 1895
Martin, S. ... ... *Diseases of the Stomach* 1895
Moor, T. H. Pearmain and C. G. *Aids to the Analysis of Food and Drugs* [1895]
Morris, H. ... ... *Injuries and Diseases of the Genital and Urinary Organs* 1895
Newman, G.... ... *On the History of the Decline and Final Extinction of Leprosy as an Endemic Disease in the British Islands* 1895
Noir, Bourneville et J. *Recherches sur l'Épilepsie et l'Idiotie* 1895
Paget, [Sir] J. ... *Records of Harvey* ... ... [Reprint of 1846 Ed.] (4) 1887
Pearmain and C. G. Moor, T. H. *Aids to the Analysis of Food and Drugs* [1895]
Richardson, B. W. *Clinical Essays. Asclepiad*, Vol. I. 1862
Snell, S. ... ... *Eyesight and School Life* 1895
Stephenson, S. ... *Epidemic Ophthalmia* 1895
Stewart, G. N. ... *A Manual of Physiology*... 1895
Stocken, J. ... ... *Dental Materia Medica*. 4th Ed.(Ed. by L. M. Stocken and J. O. Butcher) 1895
Tallerman-Sheffield Patent Localized Hot-Air Bath, The... 1895
Turnbull, J.... ... *On Consumption* ... ... (5) 2nd Ed. 1850
West, C. ... ... *Diseases of Women* ... ... (5) 3rd Ed. 1864

TRANSACTIONS, REPORTS, JOURNALS, &c.

Academy of Medicine in Ireland, Transactions of the Vols. I., 1883, IV., V., 1886-87, VII. 1889
American Journal of the Medical Sciences, The Vols. LXXXI.—LXXXV., 1881-83; LXXXVII. 1884
American Surgical Association, Transactions of the ... ... Vol. VI. 1888
Annals of Surgery ... ... (7) Vol. XI. 1890
Archives of Surgery ... ... Vol. V. 1894
Asclepiad, The ... ... (1) Vols. I.—III. 1884-86
British Gynæcological Journal, The ... ... (3) Vol. IV. 1888
Buffalo Medical and Surgical Journal ... ...Vol. XXXIV. 1895
Calendar of University College, Bristol ... ... (9) 1895
Centralblatt für Chirurgie 1894
Centralblatt für Gynäkologie 1894
Clinical Journal, The ... ... Vol. VI. 1895
Clinical Sketches ... ... Vol. I. 1895
Clinical Society of London, Transactions of the ... Vols. I.—VII. 1868-74
Diphtheria Cultures, Report of the Medical Officers of Health of Bristol on the Bacteriological Examination of 1895
Edinburgh Medical Journal (8) Vols. XXIII., Part 2—XXV., 1878-80, XXIX., Part 2—XXXII., Part 1, 1884-87
Edinburgh Obstetrical Society, Transactions of the Sessions 1868-71. 2 vols. 1870-72
Grant College Medical Society, Bombay, Transactions of the, 1894 ... 1895
Hospital, The ... ... Vol. XVIII. 1895
Hospitals—
Guy's Hospital Reports ... ... Vol. LI. 1895
Johns Hopkins Hospital Reports, The ... ... Vol. III. 1894
University College, London—Pathological Report (10) Vol. V. [N.D.]
Intercolonial Medical Congress of Australasia, Transactions of the 3rd Session, 1892 ... ... (1) 1893
International Clinics ... ... (1) 4th Series, Vol. I. 1894
Journal of the American Medical Association, The ... ... Vol. XXIV. 1895
Library Association of the United Kingdom, Report of Proceedings of the 16th and 17th Annual Meetings of the, 1893, 1894. 2 vols. 1895
Library Association Year Book, The 1895
Liverpool Medico-Chirurgical Journal, The ... ... Vols. I., II., 1857-58
London Medical Recorder, The ... ... (2) Vol. III. 1890
Marine-Hospital Service of the United States, Annual Report of the Supervising Surgeon-General of the, for 1892 ... ... (1) 1893
Medical Chronicle, The ... ... N.S., Vol. III. 1895
Medical Pioneer, The ... ... Vol. I. 1893
Medico-Chirurgical Transactions (1) Vols. LXXIII., 1890; LXXVIII. 1895
Montreal Medical Journal, The ... ... Vol. XXIII. 1895
Navy, Statistical Report of the Health of the, for 1892 ... ... (1) 1893
New England States, Vital Statistics of the, for 1892 ... ... [N.D.]
Ophthalmological Transactions ... ... Vol. XV. 1895
Quarterly Medical Journal, The .. .. Vol. III. 1895
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At p. 235, for "Lewis, H. L.," read "Jones, H. L."

Local Medical Notes.

BRISTOL HEALTH REPORTS.

At the commencement of the year the Public Health Department undertook the bacteriological examination of all cases of supposed diphtheria occurring in the city, with a view of confirming the clinical diagnosis, which must in many cases be more or less tentative. In July Dr. Davies presented a report on the work of the first six months. We were unable to give an earlier notice of this, as our last number was in the printer's hands when the report reached us. We believe that our city was one of the first in this country to undertake this sort of work, and the reports of the examinations fully justify the step taken. During the six months ending June 30th 73 cases were notified to the Medical Officer of Health; two of these were subsequently decided on clinical grounds by the medical attendant not to be cases of diphtheria. Of the 71, 29 were examined, and the Löffler bacillus found in 24; in the remaining 42 the medical men did not send inoculated tubes, though eleven were examined, with five negative results. It is to be hoped that a larger proportion will be sent in the future, as we believe the word diphtheria is used somewhat rashly. Second and third examinations were made in some cases, at varying intervals, with the result that the bacillus was found in two cases to be present twenty-five and twenty-eight days respectively. These examinations are of the greatest value, as the period of quarantine after diphtheria is by no means accurately fixed. Two very interesting cases are reported, in which the bacillus was found in the disease known as fibrinous rhinitis, the identity of the micro-organism being confirmed by Dr. Klein, to whom a specimen was sent, and further by the mother of the patients contracting diphtheria presumably from her children. Dr. Dowson, who made the examinations at the laboratory of the Public Health Department, has endeavoured to discover whether the bacillus can be shown to exist as a saprophyte under certain insanitary conditions. Unfor-

tunately his experiments have not led to any results, as no growth appeared in the tubes inoculated from foul drains or manure heaps. Certain animals—hens, a turkey, and cats—from infected houses were also examined, but with negative results, except in the case of two cats, which undoubtedly suffered from diphtheria. Commenting on these cases, Dr. Dowson expresses his opinion that an enquiry might well be made into the conditions under which domestic animals are kept, especially in the cases of small tradespeople. The report is interesting, and marks a new departure in our Public Health Department.

It is with mingled feelings of surprise and regret that we learn that certain remarks made in our last number have been construed to mean that the Public Health Department of this city is extravagant in its expenditure. After reading the paragraph over again, we are still unable to see how such a construction can be put upon our words. Nothing was further from our thoughts. No one can deny that our rates are high, but to charge the Public Health Department with unnecessarily raising them by extravagant expenditure was not our intention, and in our opinion is not implied by our words. We print below an analysis of the General District Rate, or as it is often, but erroneously, called the Sanitary Rate :—

Finance	3.58	pence in £	for half-year.
Highways, Sewers and Cleansing	8.56	,,	,,
Parks and General Purposes ...	2.99	,,	,,
Public Health	.89	,,	,,
Street Improvement Committee...	4.15	,,	,,
Baths and Washhouses Committee	.26	,,	,,
Electrical Committee	.49	,,	,,
Museum Committee	.24	,,	,,

From this it will be seen that the Department in question is one of the least expensive ones under the Sanitary Authority, requiring less than a penny in the pound. There are matters connected with the health of the city, such as sewers, cleansing, destruction of rubbish, and urinals, which come under the Sanitary Authority; but these are not included in the Public Health Department and are not under the control of the Medical Officer of Health. These, it will be seen, cost eightpence-halfpenny. We print also a statement of the cost of the Public Health Department in seven large towns where the circumstances are much the same as ours, and it will be seen that the expenditure in our city is less than in all but one :—

COMPARATIVE STATEMENT

Of the Cost of the Medical Officer's Department, Hospital Maintenance, and Port Sanitary Expenses in several large towns for the year ending 25th March, 1895.

Town.	Population.	Cost of Med. Officer's Department, Disinfecting and Health Inspection.	Maintenance of Hospitals.	Port Sanitary Working Expenses.	Total.	Equivalent to a rate of in the £.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	d.
Liverpool ...	517,980	8,441 8 2	16,124 18 10	1,433 1 6	25,999 8 6	2.09
Birmingham ...	478,113	6,273 12 0	18,618 10 11	... ...	24,892 2 11	2.95
Leeds	367,505	7,366 17 2	7,167 18 9	... ...	14,534 15 11	2.72
Sheffield ...	324,291	3,363 14 3	10 230 16 6	... ...	13,594 10 9	3.13
Bristol	221,578	4,647 19 0	3,354 6 10	1,424 12 7	9,426 18 5	2.22
Bradford ...	216,361	6,051 3 6	6,160 1 6	... ...	12,211 5 0	2.7
Hull	200,044	3,824 12 3	5,326 10 2	2,069 10 8	11,220 13 1	4.14

UNIVERSITY COLLEGE, BRISTOL.

R. Shingleton Smith, M.D. Lond., F.R.C.P. Lond., has been made Emeritus Professor of Medicine.

In the Faculty of Medicine the entries this year amount to 19, with 10 in the Faculty of Arts for the Preliminary Scientific Examination for the University of London.

The Annual Distribution of Prizes to the successful students of the Faculty of Medicine took place in the Theatre of the Museum and Library on November 20th. The Bishop of Hereford, as President of the College, occupied the Chair, and after a few words requested Mr. Nelson C. Dobson to take his place and present the prizes and certificates. With the assistance of the Dean of the Faculty, this ceremony was quickly performed, midst the usual uproarious accompaniment which medical students consider necessary on these occasions. Mr. Dobson then gave an excellent address to the students, reminding them of the seriousness of the profession they had adopted, and especially dilating on the duties that they will have to perform, when qualified, to their patients, to their profession, and to the public. The address was listened to with marked attention and with more respect from the students than is usual; and with a vote of thanks to Mr. Dobson, proposed by Mr. Albert Fry and seconded by Mr. P. J. Worsley, the proceedings terminated.

The following students have recently passed examinations :—

University of London. — M.B. Examination, October, 1895. Pass List :—*Second Division*—J. H. Bodman.

University of Durham.—Examination for the degree of Bachelor of Medicine. First and Second Examination (with 2nd Class Honours.) —R. F. Moorshead.

Examining Board in England by the Royal Colleges of Physicians and Surgeons —Four Years Curriculum. October. *Materia Medica*—H. L. W. Norrington. Five Years Curriculum. Part I. *Chemistry and Physics* —K. H. Beverley. *Elementary Biology*—A. R. M'Ennery. *Elementary Anatomy*—A. M. S. Tordiffe. Part II. *Anatomy and Physiology*—F. A. Coates, E. S. Edwards, G. H. Irvine, J. W. Wallace. *Physiology*—G. L. Wright.

Royal College of Physicians.—Final Examination—W. T. Lydall, E. W. Ormerod, F. D'A. M. Williams, H. B. Wilson.

Royal College of Surgeons.—First Professional Examination in Anatomy and Physiology for the diploma of Fellow, Nov. 11.—A. E. H. Pinch, M.R.C.S., L.R.C.P.; H. T. S. Aveline, M.R.C.S., L.R.C.P.

Society of Apothecaries.—September. *Forensic Medicine*—A. H. Grace.

HOSPITAL FOR SICK CHILDREN AND WOMEN.

W. Barrett Roué, M.D., M.S. Durh., has resigned his position on the active staff, and been appointed Consulting Physician.

E. Leonard Lees, M.D., C.M. Edin., has been appointed Physician.

W. M. Willis, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed House Physician.

EYE HOSPITAL.

C. H. Walker, B.A., M.B. Cantab., F.R.C.S. Eng., has been appointed Assistant Surgeon.

SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

Physiology.—The following composition by a twelve-year-old schoolboy was the cause of his being recommended to take a special course in physiology the next term. The theme given him was "Breath." "Breath is made of air. We always breathe with our lungs, and sometimes with our livers, except at night, when our breath keeps life going through our noses while we are asleep. If it wasn't for our breath, we should die whenever we slept. Boys that stay in a room all day should not breathe; they should wait till they get outdoors. For a lot of boys staying in a room make carbonicide; and carbonicide is more poisonous than mad dogs, though not just the same way. It does not bite; but that's no matter as long as it kills you."

Medical Men and Medicine Men.—In a paper on this topic, Dr. E. J. Overend, of San Francisco, says: "There is a way of educating the public to a decent understanding of the limitations of medical science. It consists in telling patients what we do not know as well as what we know. They should be taught that medicine is made up of a number of sciences, more or less exact, the less exact of which is therapeutics, the very one by which they judge the whole. When that time arrives the patient will be satisfied with the scientific regimen laid down by the physician, and not look for a 'bottle of bitterness' as an indispensable adjunct. Drug mania has at present full sway in the profession, constituting another reason why the average doctor is in some danger of being called a 'medicine man.' The surgeons, as a rule, in avoiding Scylla, are drawn into Charybdis, they are open to the objection that they are afflicted with *pruritus secandi*. The profession needs a robust scepticism for its protection, not only from manufacturing pharmacists, but even from prominent members, who advocate with persuasive pens novel but worthless methods."—*Occidental Medical Times.*

Clinical Records (13).—Un jeune Esculape, fraîchement nanti de son diplôme, est d'une extrême timidité. Chaque fois qu'il est appelé près d'une jeune femme, il se trouble, tâte le pouls en se tenant à distance et se trouve dérouté pour un rien.

Tout récemment il est demandé près d'une dame souffrant d'accidents abdominaux. Bien timidement il s'approche et, sans soulever la couverture, il glisse sa main dans le lit, pour pratiquer la palpation abdominale. Le ventre est chaud, gonflé, non douloureux à la pression. La fluctuation est manifeste. Décidément il s'agit d'une tumeur liquide, vraisemblablement d'un kyste ovarien. Notre jeune confrère hasarde timidement le diagnostic tumeur et demande une consultation. En attendant il prescrit un traitement inoffensif. Il allait se retirer lorsque la malade le rappelle et lui dit: "Mon cher docteur, j'espère qu'après avoir prescrit un traitement pour mon sac en caoutchouc, vous allez en prescrire un pour moi."

Notre jeune novice avait pris une vessie pleine d'eau chaude pour le ventre de sa cliente.—*La Revue Médicale.*

Medical Missions.—Our attention is now painfully directed towards China. Mr. D. Duncan Main, the Medical Officer of the Hospital at Hang-Chow, where 11,865 new dispensary patients were treated in 1894, says:—

"Most of the diseases we have to treat are due to insufficient food, bad food, uncooked food, insufficient clothing, malaria, and dirt. Dirt certainly brings us thousands every year. There is always an epidemic of hydrophobia, in its literal meaning, in China. Many of the patients are very poor, and we must draw a veil of charity over a great deal, because many of the poor creatures come in their wardrobe, which can never be washed, because there is nothing to take its place. The superstition we have to deal with is even worse than their physical condition. I must confess it is not always easy in dispensary work to be patient and perfectly just in thought and feeling with superstitious patients, who seem to think, by virtue of their disease, they have a right to demand a heap of time and attention and an extra supply of (*tin hao tih yah*) very good medicine. It takes a great deal of grace to keep smiling and self-forgetful, especially when one's own vitality is at a low ebb, and nerves are all unstrung through overwork and constant contact with the diseased and dying. During

hot-house, high-pressure days, when the thermometer is over 100 deg. in the shade and the atmosphere of the waiting-room is thick and very much tarnished, dispensary work is most trying; still, it affords many opportunities of triumphing over self!

"It is in the wards that the medical missionary is brought into contact with the patients under the most favourable conditions for making an impression, and convincing the patients that he is practically interested in them, both physically and spiritually. On the other hand, the patients are able to study our aims and objects, and to *see* the practice of Christianity, as well as *hear* the theory.

"In the autumn a mandarin, who had been in a private ward for three weeks undergoing treatment, handed me a packet containing $100 as a small donation to help on our good work. He said he had been watching me during his stay, and had wondered very much why I never asked him for money! He also said he knew Chinamen who had money and did deeds of kindness for their own people, but he did not know any of his own countrymen who left home and friends and went to a foreign country to carry on a work of charity. There can be no doubt that there are many who believe in a charity which shows itself in practical benevolence and treatment of disease. A Chinaman has faith in anything that will prolong his days, and he certainly looks with respect and confidence upon the man who can heal disease."—*Proceedings of the Church Missionary Society*. 1895.

Medical Philology (XVI.)—The use of "child" either as a transitive or intransitive verb, and of "childing" as a verbial substantive or a participial adjective, has long dropped out of ordinary English talk. But at one time they were recognised forms. The *Catholicon* (1483) has "to Childe; *parturire, eniti, fetare, parere, profundere*." The *Promptorium* (*c.* 1440) has "Chyyldyn, or bryngyn furthe chylde *Pario*. Chyldynge, or woman wythe chylde. *Pregnans*." Mr. Way, Mr. Herrtage, and the *New English Dictionary* give several illustrations of these early forms. Some of these I arrange in chronological order, but the first of the illustrations is not to be found amongst them. "Cildiungwif," as the equivalent of "puerpera," occurs in Archbishop Alfric's Vocabulary, a work of the tenth century (Wright's *Vocab.*, 108, 17). Orm, the writer of the series of Homilies known as the *Ormulum* (*c.* 1200), says: "þe shall Elysabæþ þin wif an sune childenn" (ed. Holt, 156). Describing the visit of the Blessed Virgin Mary to her kinswoman Elizabeth, the *Cursor Mundi* (*c.* 1280) has:

'þar duelld vr lauedi wit hir nece,	At hir childing hir was helpand"
Til ion was born, a wel godd pece,	E.E.T.S., ed. Morris, p. 634, ll. 11057–9.

In *Arthour and Merlin* (*c.* 1330) is the passage: "Sche childed a selcouthe grome" (Abbotsford Club ed., 978); or, in modern English, "She brought forth a wonderful boy." I have not been able to refer to this work, but the passage, I presume, alludes to the birth of Merlin. The *Ayenbite of Inwyt*, or Remorse of Conscience (1340), has: "þe wyfman lyþ a chi[l]dbedde oþer nyȝ to childi" (E.E.T.S., ed. Morris, p. 224). Maundevile (1356), giving the record of the Incarnation according to the Saracens, says that Mary "childed undre a Palme Tree" (ed. Halliwell, p. 133). Wyclif's reading of Genesis xix. 37, 38 (1382) is: "The more douȝtir childide a sone, and clepide his name Moab . . . and the lesse douȝtir a son, and clepide his name Amon." In the 15th century translation of Higden's *Polychronicon* mention is made of a woman who "hadde vij. childer at oon childinge" (Rolls Series, ed. Lumby, I, 205). In the story, "A Prophecy Fulfilled," in the *Gesta Romanorum* (*c.* 1440), Dolfinus, wishing to destroy the forester's new-born babe that he had been told in a dream would succeed him, sent messengers to the house of the forester, telling them to take "the little Infaunt, that his wyf this nyght chylded" (E.E.T.S., ed. Herrtage, p. 209). In *Knight de la Tour Landry* (*a.* 1450) is the statement that "whanne she hadde childed she thanked God" (E.E.T.S., ed. Wright, 108). The *Medulla* (1468) has "*Pario*. To chyldyn. *Parturio*. To ympyn, beryn, or chyldyn." Latimer (1549), in his Second Sermon before Edward VI., in order to show that "it is wisdom and godly knowledge that causeth a king to be feared," introduced the incident of the appeal which the two mothers made to Solomon, and said "within ii dayes they chylded both" (ed. Arber, 71). Spenser has "chylded" (*Faerie Queene*, VI. xii. 17), and Heywood (1611), in the *Golden Age*, IV. i., says, "The Queene shall childe a daughter beautifull."

"Childing" as a participial adjective was very common and lasted much longer. In its figurative sense, it is familiar to readers of Shakspere, who will remember Titania's mention of "the childing autumn" (*Mid.-N.D.* II. i. 112). In this adjectival form it continued till the present century, and is even now often met with in botanical definitions.

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